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DESIGN OF THE LAKE SHELBYVILLE VISITOR CENTER

LAKE SHELBYVILLE RESERVOIR, Illinois
ST. LOUIS DISTRICT
U.S. ARMY CORPS OF ENGINEERS

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
OFFICE OF RECREATION AND PARK RESOURCES
DEPARTMENT OF ARCHITECTURE
NATURAL HISTORY MUSEUM
CHAMPAIGN, ILL. 61820

FINAL REPORT
PROJECT No. 101-77-431

AUGUST, 1978

DESIGN OF THE LAKE SHELBYVILLE
VISITOR CENTER

Lake Shelbyville Reservoir, Illinois
St. Louis District
U.S. Army Corps of Engineers

Final Report
Project No. 101-77-431

University of Illinois at Urbana-Champaign
Office of Recreation and Park Resources
Champaign, Illinois 61820

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Preface

The research study and the related plans represent the culmination of a multi-disciplinary approach to the planning of a Visitor Center at Lake Shelbyville, U.S. Army Corps of Engineers in Central Illinois. This project is but one of a continuing series of projects with which the University of Illinois has been involved relating to the large reservoirs of Central Illinois.

The design team has attempted to incorporate some new and relatively untried exhibit presentations along with some more traditional exhibit approaches in an effort to provide a functional, inviting Center for visitors to Lake Shelbyville. The ultimate test of the success or failure of the Visitor Center will be the satisfaction of the users and the evaluation of their perceptions and reactions to the concepts and ideas presented to them.

A degree of flexibility has been designed into the Center so that it can handle different size groups, appeal to various age levels and provide for changeable exhibits to fit the season or other special interests.

Acknowledgments

This project is a continuation of the interest which has been generated throughout Illinois by the creation of the large reservoirs in Central Illinois by the U.S. Army Corps of Engineers. This type of project provides an opportunity for the faculty and students of the University to get involved with research into new techniques and methods which should be of material benefit to the Corps of Engineers as well as to the users, a major portion of what are expected to be from Illinois.

The research and design team was composed of:

PRINCIPALS:

Robert D. Espeseth, Project Coordinator
Office of Recreation and Park Resources
Department of Leisure Studies

Donald F. Hoffmeister, Director
Natural History Museum

Harry C. Henriksen, Curator of Exhibits
Natural History Museum

Arthur L. Kaha, Jr., Assistant Professor
Department of Architecture

GRADUATE ASSISTANTS:

Thomas D. Mahaffey, Department of Architecture

William H. Nicksch, Department of Architecture

William A. Smith, Office of Recreation and Park Resources

The design team worked very closely with Winston Campbell, Project Manager; Jill Campbell, Project Liaison and other staff members from Lake Shelbyville in the formulation of the plans. Representatives from the St. Louis District Office also had input into the planning process. The team appreciated the excellent degree of help and cooperation given by all concerned.

INTRODUCTION

-Water is one of our most important natural resources and its control, use and conservation are matters of national concern.

Office of the Chief of Engineers

The Corps of Engineers, U.S. Army, has been in water resources development since 1824. Their present responsibilities cover the entire field of comprehensive water resources planning and development, including flood control; water supply; hydro-electric power; water quality control; recreation; and fish and wildlife conservation. The preservation of esthetic and ecological values in natural settings is also a responsibility of the Corps in relationship to projects.

In keeping with the broad responsibilities of the Corps, the Office of the Chief of Engineers has established certain goals and objectives to help meet the responsibilities related to resource management and recreational use. Accordingly;

"The goal of the Corps' Recreation-Resource Management Program is to manage the public lands and waters as a public trust to be used and enjoyed by the public in perpetuity for outdoor recreation activities. Further, to insure that the natural resources of the project are maintained and enhanced through ecologically sound management thereby contributing to a quality environment." (Dept. of Army, OCE, ER 1130-2-410, Management of Natural Resources and Outdoor Recreation at Civil Works Projects)

"It is the Corps' general policy to minimize conflict between recreational aspects and other project purposes. This policy is not always understood by the public and as a consequence, the Corps has been critized for implementing and enforcing regulations that would preserve and protect the environmental and sociological values of the project area." (Dept. of Army, OCE, Public Affairs Plan in Support of Recreation-Resource Management)

The Lake Shelbyville Visitor Center will be the focal point for visitor contact, information and orientation for the project and the related region. The information and interpretation available at the visitor center will increase the perceptiveness of visitors and thereby enhance their enjoyment and experience while at Lake Shelbyville. It has been planned so it will create an appreciation and better understanding of the role of the Corps of Engineers in the Lake Shelbyville project, its purpose, history, benefits and significance in the lives of people in Illinois.

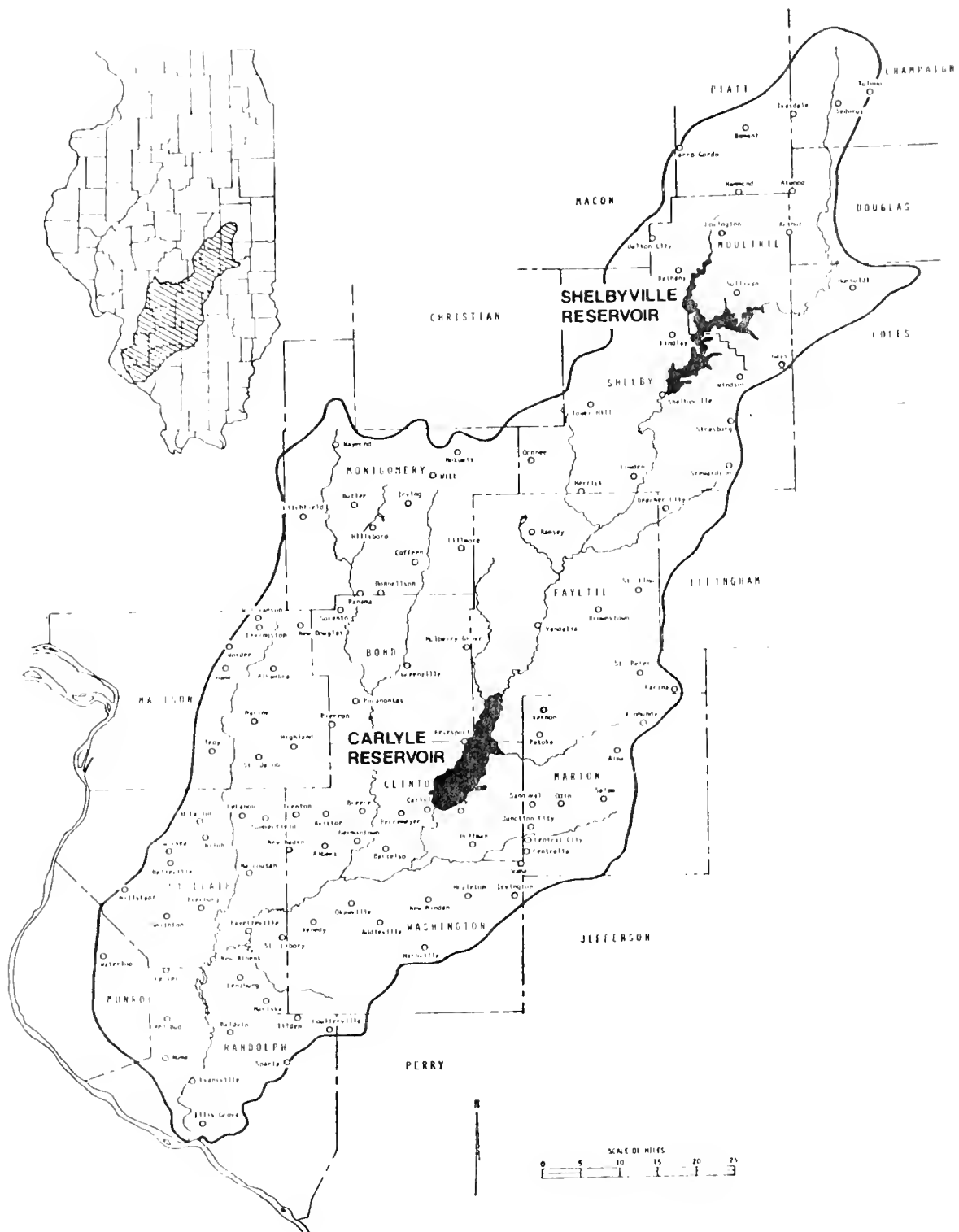


Figure 1 KASKASKIA RIVER BASIN

THE VISITOR CENTER

OBJECTIVES-

The Office of the Chief of Engineers (OCE) issued in February, 1977, "Interim Guidance for Implementation of the U.S. Army Corps of Engineers Visitor Center Program" which established broad objectives for interpretation at Corps of Engineers' projects. The directive also provides guidelines for planning, design and operation of visitor center facilities at these projects.

This document states that:

"The primary objectives of a project visitor center is to provide project related information to the visitor. Information provided should help the visitor understand the project and the role of the U.S. Army Corps of Engineers, and provide assistance that will aid the visitor in utilization and enjoyment of facilities provided for public use. Area related information may be intergrated within available space to further enrich the visitor's experience.

"The visitor center program presents a unique opportunity to explain to the American taxpayer what the Corps of Engineers does and the reasons for doing it. The authority for the conduct of this program rests in our obligation as servants of the people to provide factual, easily understood information about the Corps' role in development of our Nation."

The Interim Guidance also establishes the following policies for visitor centers which are given careful consideration in the planning process:

- a. Visitor facilities will be provided where justified by the level of visitation and demand for project related information. A visitor center is not required at every project; however, provisions should be made to properly sign each project and to make known the source from which project information can be obtained. When a visitor center is not provided, the project office should be used as an information center.
- b. Visitor centers will be designed to operate with a minimum number of personnel. Contract or temporary personnel should be used to operate visitor center facilities whenever possible. In no case will control of visitor center content be relinquished to a contractor.
- c. Funding of visitor centers at operating projects will be from operation and maintenance funds. Construction general funds will be utilized at projects that are under construction.
- d. Provisions will be made for dissemination of visitor information at major projects commencing with initiation of significant construction and continuing through the operational stage.
- e. All centers will incorporate provisions for the handicapped.

The St. Louis District Corps of Engineers, in August of 1976, prior to the previously mentioned Interim Guidance from OCE, established four broad policy objectives for interpretive development. Interpretation at projects in the district should be directed toward:

1. Enhancing visitor understanding, appreciation, and enjoyment of the project area by interpreting scenic, natural, and cultural resources.
2. Aiding recreation-resource management objectives by interpreting management activities, management problems, and by relating wise use of recreational resources to the users.
3. Assisting the public in finding and using project facilities and attractions by developing orientation programs and facilities.
4. Promoting public understanding of the Corps of Engineers' programs and activities to gain public support.

More specifically, the interpretive objectives at the project Visitor Center (through all exhibits and audio-visual material) will be aimed at accomplishing the following:

1. To help visitors get a grasp of the Corps' frequently stated interpretive goal: through interpretation, we seek to understand what is here, then appreciate its worth, and ultimately to protect the resource for generations to come.
2. To enhance visitor understanding, appreciation, and enjoyment of the project area by interpreting scenic, natural, and cultural resources.
3. To create an awareness and understanding within the visitor as to the purpose, benefits, and history of the Lake Shelbyville Project through the significance of its major resource management objectives: Flood control, water supply, recreation, downstream water quality control, and wildlife management.
4. To aid recreation-resource management objectives by interpreting management activities, management problems, and by relating wise use of recreational resource to the users.
5. To assist the public in finding and using project facilities and attractions by developing orientation programs and facilities.
6. To provoke visitors to return to the project as well as to visit other projects in a district, regional, and nationwide perspective.
7. To provide an educational resource for area schools and organizations.
8. To provide unity in design between all aspects of the total Visitor Center area. This strengthens visitor identity in a visual and emotional sense--security in a comfortable setting.
9. To help foster a better understanding of the activities and functions of the Corps of Engineers.

FUNCTIONS-

The Visitor Center is located at a very strategic point overlooking the lower portion of Lake Shelbyville and the dam for the lake. The entrance road from U.S. 16 or the dam will lead the incoming traffic to the Visitor Center which will provide overall orientation and information and will be the major interpretive station in the project. It contains several functional elements:

1. The Information/Contact Area is an attended station in the Visitor Center Lobby, where the visitor may first come in contact with park personnel. At this station the attendant welcomes the visitors, provides them with literature, answers their questions and starts them on the visitor center tour and to other points of interest in the project.
2. The Exhibit Area will carry the major responsibility for communicating an overview of the project, its relationships to the natural setting, the activities of man in the region and the project itself. This area should stimulate interest, suggest the appeal of other features and facilities in the project, arouse curiosity and motivate further investigation through the senses of touch and smell.
3. An Audio-Visual Program in the audio-visual room will provide a perspective on the overall project, its relationship to the role of the Corps of Engineers and to the natural resources of the Kaskaskia Valley. It will stimulate visitors to visit the Exhibit Area and other areas in the project.
4. The Overlook Terrace will provide visitors an immediate visual contact with Lake Shelbyville. Interpretive devices will enhance the scenic view from the terrace. From the terrace, trails to the dam and to the lake shoreline will emanate. For guided tours or hikes, this would provide an assembly point.

SETTING-

A beautiful site has been selected for the Lake Shelbyville Visitor Center on the south end of the lake at the east end of the dam. From this vantage point of 40 feet above the surface of the lake, a panoramic view of the lower end of the lake unfolds before the visitor. The view includes water, wooded shoreline, recreational facilities and activities and the general character of the old river valley.

The site and the exterior building design were established prior to the planning of the visitor center interior and the exhibits. The design of the overlook terrace will, however, be a part of this project. The building is basically rectangular (about 40' x 80'), with a flat roof and brick veneer exterior surface.

Parking has been provided nearby for visitor convenience. The Visitor Center may also become the starting point for trails leading to the dam and to a trail along the lake shore.



to shelbyville
VISITOR CENTER LOCATION*

ITE PLAN DAM WEST & DAM EAST ACCESS AREA

NOT TO SCALE

FIGURE 2



THE VISITOR

VISITOR CENTER

There are three basic interest areas or groups which would be anticipated for use of the project:

1. Local residents will use the lake frequently on short trips of a day use nature. The population in the related counties will not be as great as in the other groups, but will probably use the facilities on a higher per capita basis.
2. Metropolitan area residents from both the Chicago and St. Louis areas constitute the major markets for recreation users. The St. Louis SMSA includes nearly three million people living on both sides of the Mississippi River. The project is slightly over two hours drive of the St. Louis metropolitan area primarily on interstate highways. The Chicago SMSA includes nearly seven million residents which are slightly over a three hour drive away, also primarily on interstate highways. Visitation from both of these market areas is heavily oriented to weekend and extended vacation use. Very little (if any) day use can be expected from this group.
3. Casual visitors from Interstate Highway 57 to the east and Interstate Highway 70 to the south could be a significant factor. There are several access routes from each of the above highways into the Lake which vacationers who are passing through the area could use to take advantage of facilities available. These visitors will probably require more in the way of interpretation and orientation than those who live closer to the project. If Illinois had better information dissemination along the interstate highways at entry points into the state, more pass-through visitors could be expected.

VISITOR CHARACTERISTICS-

There was no significant source of data in this area directly related to Lake Shelbyville. More definite information will be available when the proposed research work of the Institute for Environmental Studies, University of Illinois, is completed.

a. Type of transportation

Personal automobiles will be the primary mode of transportation throughout the year. Some will be towing camping trailers during the warm weather months which will require additional parking space. Organized groups on tour or school classes will use buses.

b. Group or family size

Families and small groups of individuals arriving by auto will average 3.5 to 4.2 persons per vehicle. Larger groups arriving in buses will range from 30 to 50 people. The later groups will probably not have as high a repeat visit factor as the families and individuals.

c. Seasonal patterns

Primary use concentration will occur during the period of April through October which relates to most recreationally oriented areas. The heaviest months can be expected to be June-July-August. During this period, the family will be the primary grouping. Off season use can be expected to be light with school groups and retirees the predominate users.

d. Age, education and sex

Age of users will range from the very young to old people with no particular emphasis on any age group. The same will be true with education ranging from pre-elementary level through those with advanced degrees. No specific male-female split is expected or planned for.

e. Purpose of visit

It is expected that the majority of the visitors will be oriented toward day-use activities and incidental travel because of the location of the center. Use by campers will probably not total more than 40% of the use load with the greatest number from the closest campgrounds-private or public.

f. Awareness of project and Visitor Center

Many summer visitors from outside the local area will have had little exposure to or knowledge of the project. In the St. Louis or Chicago market areas, the awareness of the project is very low. Awareness of the Visitor Center, however, could be quite high in the local area if there is good contact made through schools and civic organizations with a continuing program of information.

VISITOR CAPACITY-

The amount of visitor use is not really an important factor in this project because the size of the Visitor Center was predetermined prior to the start of the interior design. Depending upon the receptivity of the Visitor Center and the public relations and information program generated by the project staff, the size of the building will prove out to be adequate or too small. It is not felt that it will be too large.

The total capacity of the audio-visual room will depend upon the length of the presentation, the seating capacity and whether presentations will be continuous on a regular schedule or on demand.

Assuming an 8-10 minute program, there could be 4 groups (per hour) of 25 people (seating capacity) or 100 persons per hour as the capacity of the A-V room with a program every 15 minutes. If this time increment were doubled to one every 30 minutes, then the capacity would be 50 persons per hour.

The National Park Service uses a figure of 16 to 20 net square feet per person (circulation space) which approximates a general intensity of use at which a feeling or sense of over-crowding is perceived. Therefore, in the Lobby area with a net of 400 sq.ft. of space available, 20 to 22 people could be accommodated at one time.

If a net of 640 sq.ft. of circulation space around exhibits were available in the audio-visual room and in the exhibit area, then 32-40 persons could be accommodated.

In summary, the anticipated maximum capacity of the Visitor Center at any one time would be 72-87 persons.

Audio-Visual Room	20-25
Lobby	20-22
Exhibit Areas	32-40
	<u>72-87</u> persons

If a more optimum figure of 25 sq.ft. per person were used, then the capacity would be reduced to 60-80 persons at one time. This would accommodate 2 school groups at a time or 15-18 average sized family groups, which we feel is in line with current staff anticipation.

EVALUATION-

It would be of value to the project, the Visitor Center staff and the District Office to initiate some type of an evaluation process from a base point; the opening of the Visitor Center. This on-going evaluation would provide valuable information on the visitor to the center for consideration by project and District staff in relationship to future modification of programs and exhibits or design of new centers at other locations.

The development of an evaluation instrument could tie in with the proposed evaluation project being initiated by the District Office for several projects in Illinois and Missouri.

The in-depth evaluation of the Visitor Center should involve visitors, center personnel and supervisory personnel. It should look at programs, exhibit design, maintenance, building design, personnel, accessibility and related areas. This should be an on-going effort so that changes in tastes and desires can be incorporated into planning for exhibit and program modifications and personnel services.

The end result should be to provide a feedback loop in the planning and design process and a way for designers and interpretive personnel to systematically learn from past successes and failures. Evaluation studies should be conducted by persons knowledgeable in both design (from the broad standpoint) and behavioral sciences.

DESIGN OF VISITOR RELATED SERVICES

GENERAL -

The building has been designed and oriented to attract the visitor from the parking lot into the lobby area via the main entry doors. A relocation of the entry doors has been accomplished to provide a better orientation to the interior focal point - the information counter in the lobby. From this focal point, major facilities and visitor related services such as drinking fountain, telephone, restrooms, exhibit and audio-visual areas and the overlook terrace will be in relatively close proximity. Information not immediately discernable to the visitor can be obtained at the counter.

LOBBY -

The information counter is designed as a semi-circle so that it is uniformly accessible from anywhere in the lobby. The attendant on duty will have complete surveillance of the lobby area, both exterior access doors and entrance and exit to both the exhibit area and the A-V room. They will have access to the projection equipment for the A-V room from the back area of the counter. The circumference of the counter will provide ample space underneath for storage of brochures, maps and other informational items. Remote controls for lights and some audio elements will be on the backwall. A speaker system in the building and on the terrace will allow for announcements, etc. A changeable weather/message board and a clock will be prominently displayed.

A drinking fountain and some seating will be provided in the lobby for comfort of the visitors. A large, colored aerial photograph with the main use areas noted will be mounted on the wall facing the counter for easy reference by the attendant. The Corps of Engineers symbol will be conspicuously displayed in a number of locations without being overpowering.

EXHIBIT AREA-

After a careful analysis of the different possibilities for subject matter which could be included in the Visitor Center presentation, a basic story line was developed for the exhibit area and another story line for the initial audio-visual slide presentation in the A-V area. The exhibit area and A-V story lines are complementary with a minimum of duplication, but allowing for re-emphasis of certain key points relating to the Corps.

The story elements were developed to form the basis for determining the story line and the sequence of exhibits to be subsequently developed. (Figure 3). The alternative possibilities for portraying the story element were considered, discussed with Corps personnel and reviewed by them, to finally determine the best method available which would tie in with other elements to provide the best continuity. A variety of media techniques were considered which would appeal to several senses at a time because use of two or more senses increases interest level considerably.

The straight line story line or Sequence of Exhibits was transformed into an exhibit sequence following the indicated goals and objects and within the configuration of the exhibit area dictated by the architectural plan. This process led to the evolution of the conceptual diagram (Figure 4) for the entire Visitor Center with primary emphasis on the exhibit area. Changes can and have been made as the review process determined that modifications were necessary to improve and strengthen the presentation.

The first of several schematic floor plans (Figure 5) has set the basic presentation pattern envisioned for the Visitor Center. The schematic flow diagram (Figure 6) relates directly to the schematic floor pattern and should be viewed together as they are integrally related. The arrows indicate view points or orientation for observing exhibits.

The flow pattern of the entire building provides for easy visitor movement with a minimum of interference or conflict. Natural flow patterns bring visitors directly to the reception counter without distraction. From this focal point, access to the other principle elements of the Center is more readily apparent or can be easily pointed out.

Within the exhibit area the visitor is given some opportunities for choosing alternative routes depending upon individual interests or attractions. The primary flow of the story line is given greatest emphasis so most visitors will follow the intended flow pattern.

Changes to this preliminary concept can be made. However, it is intended that the basic flow pattern and exhibit relationship be retained.

GOALS-OBJECTIVES

ENCOURAGE VISITOR PARTICIPATION
WITHIN VISITOR CENTER AND INTERACTION
WITH EXHIBITS.

GROUP EXHIBITS WHICH ARE RELATED BY
STORY LINE.

CREATE A DYNAMIC AND INTERESTING
SEQUENCE OF SPACES, THUS COMPLEMENT-
ING A DYNAMIC AND INTERESTING STORY
LINE.

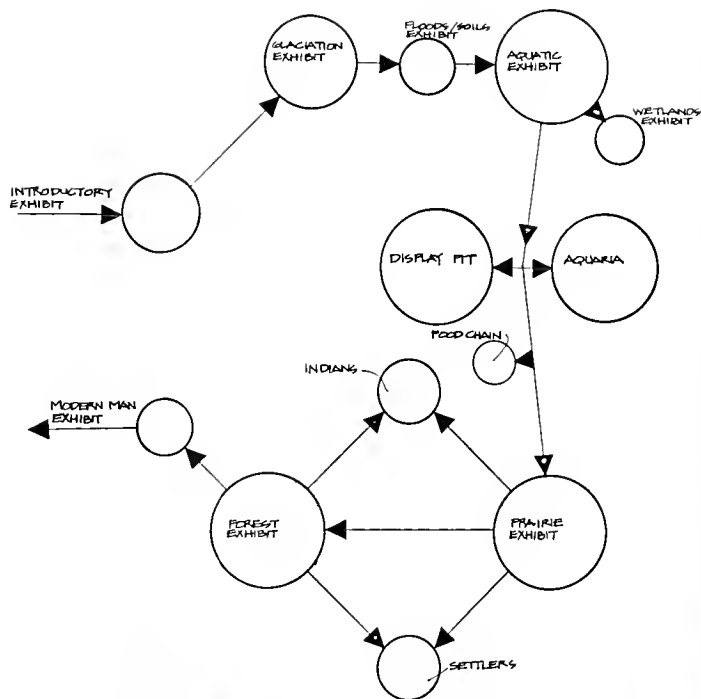
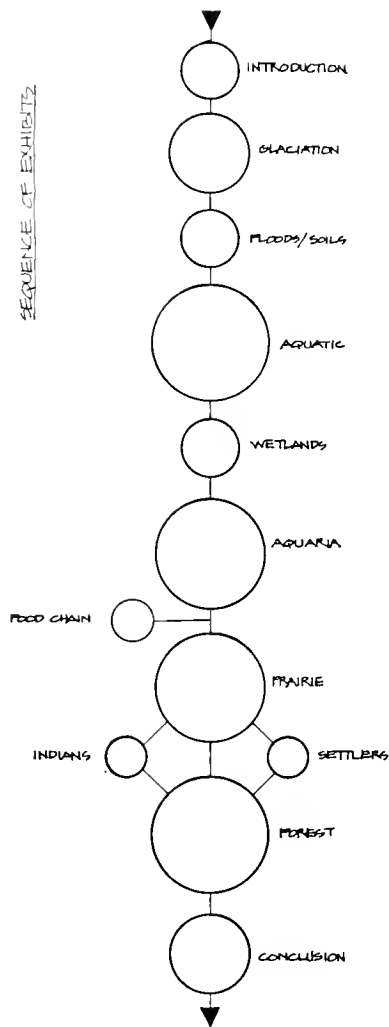
HAVE INTRODUCTORY EXHIBIT DRAW PEOPLE
INTO THE EXHIBIT AREA AND "SET THE
STAGE" FOR THE VISITOR TO ANTICIPATE
AND UNDERSTAND THE EXHIBITS TO FOLLOW.

ALLOW FOR VISITORS OF ALL AGES TO
ENGAGE IN PHYSICAL PARTICIPATION, AS
WELL AS SPECTATOR OR EMOTIONAL
PARTICIPATION WHEREVER POSSIBLE.

ENHANCE THE ORGANIZED AND UNIFIED
CHARACTERISTICS OF THE STORY LINE
THROUGH ORGANIZED VISITOR FLOW.

HAVE CONCLUDING EXHIBIT EFFICIENTLY
DIRECT PEOPLE OUT OF THE EXHIBIT
AREA, AND TIE STORY LINE TOGETHER.
THIS EXHIBIT SHOULD RELATE TO
INTRODUCTORY EXHIBIT

SEQUENCE OF EXHIBITS

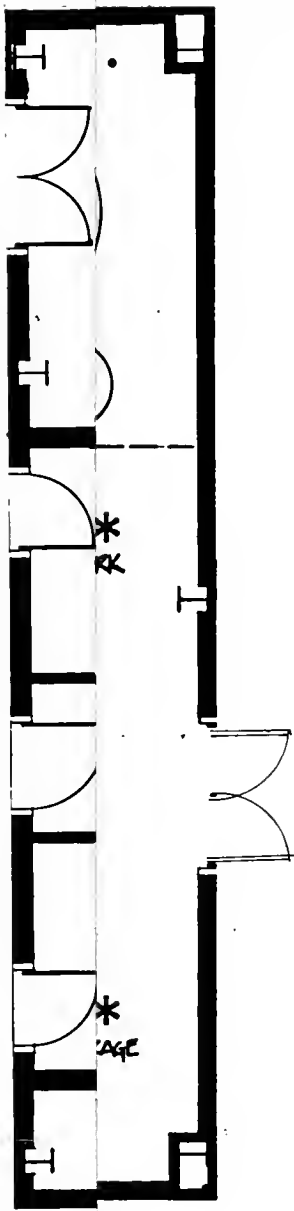


SEQUENCE OF EXHIBITS WITHIN EXHIBIT AREA

FIGURE 3

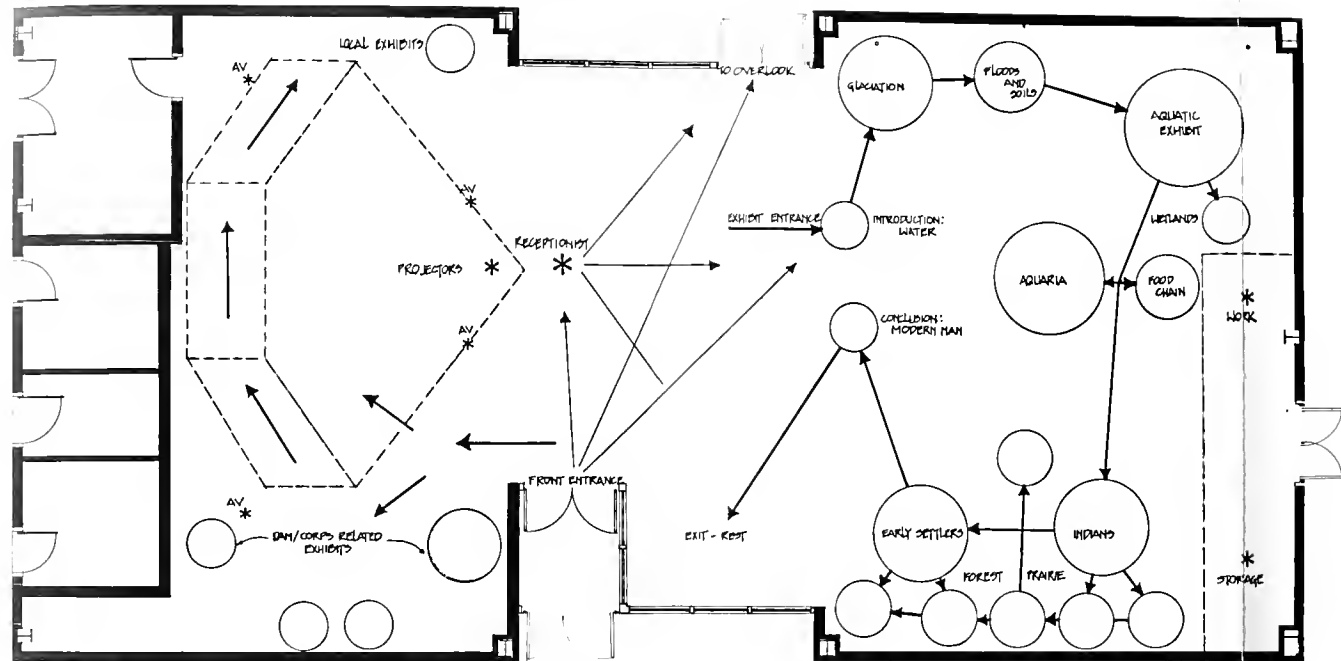
GOALS-OBJECTIVES

1. ENCOURAGE VISITOR PARTICIPATION WITHIN VISITOR CENTER AND INTERACTION WITH EXHIBITS
2. GROUP EXHIBITS WHICH ARE RELATED BY STORY LINE
3. CREATE A DYNAMIC AND INTERESTING SEQUENCE OF SPACES, THUS COMPLEMENTING A DYNAMIC AND INTERESTING STORY LINE
4. HAVE INTRODUCTORY EXHIBIT DRAW PEOPLE INTO THE EXHIBIT AREA AND "SET THE STAGE" FOR THE VISITOR TO ANTICIPATE AND UNDERSTAND THE EXHIBITS TO FOLLOW.
5. ALLOW FOR VISITING OF ALL AGES TO ENGAGE IN PHYSICAL PARTICIPATION, AS WELL AS SPECTATOR OR EMOTIONAL PARTICIPATION WHEREVER POSSIBLE.
6. ENHANCE THE ORGANIZED AND UNIFIED CHARACTERISTICS OF THE STORY LINE THROUGH ORGANIZED VISITOR FLOW.
7. HAVE CONCLUDING EXHIBIT EFFICIENTLY DIRECT PEOPLE OUT OF THE EXHIBIT AREA AND TIE STORY LINE TOGETHER. THIS EXHIBIT SHOULD RELATE TO INTRODUCTORY EXHIBIT



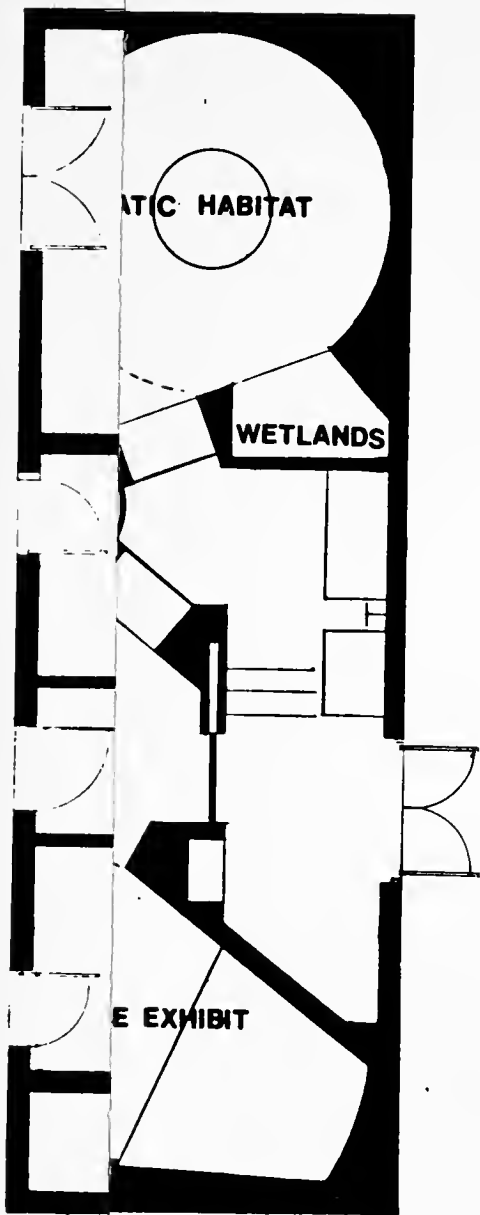
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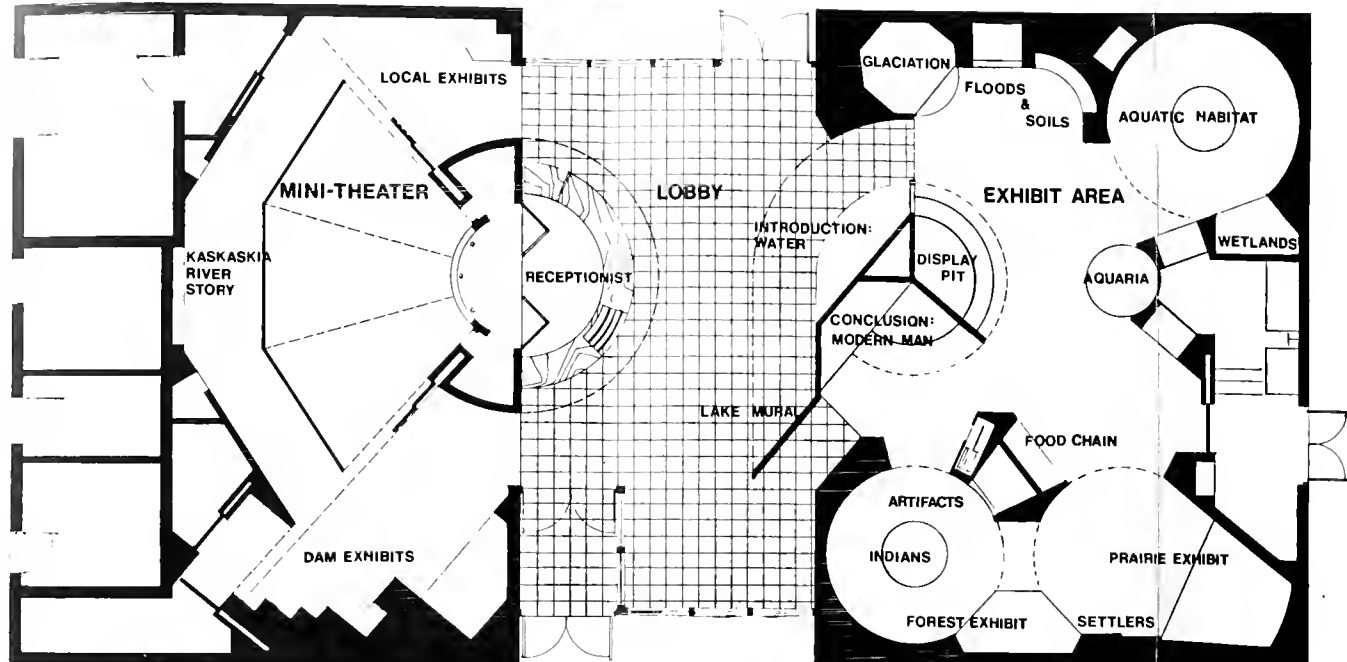


CONCEPTUAL DIAGRAM

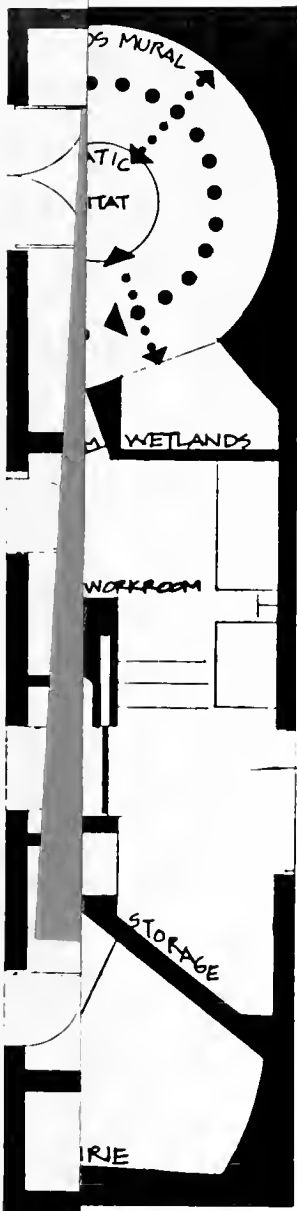
FIGURE 4



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SCHEMATIC FLOOR PLAN **FIGURE 5**



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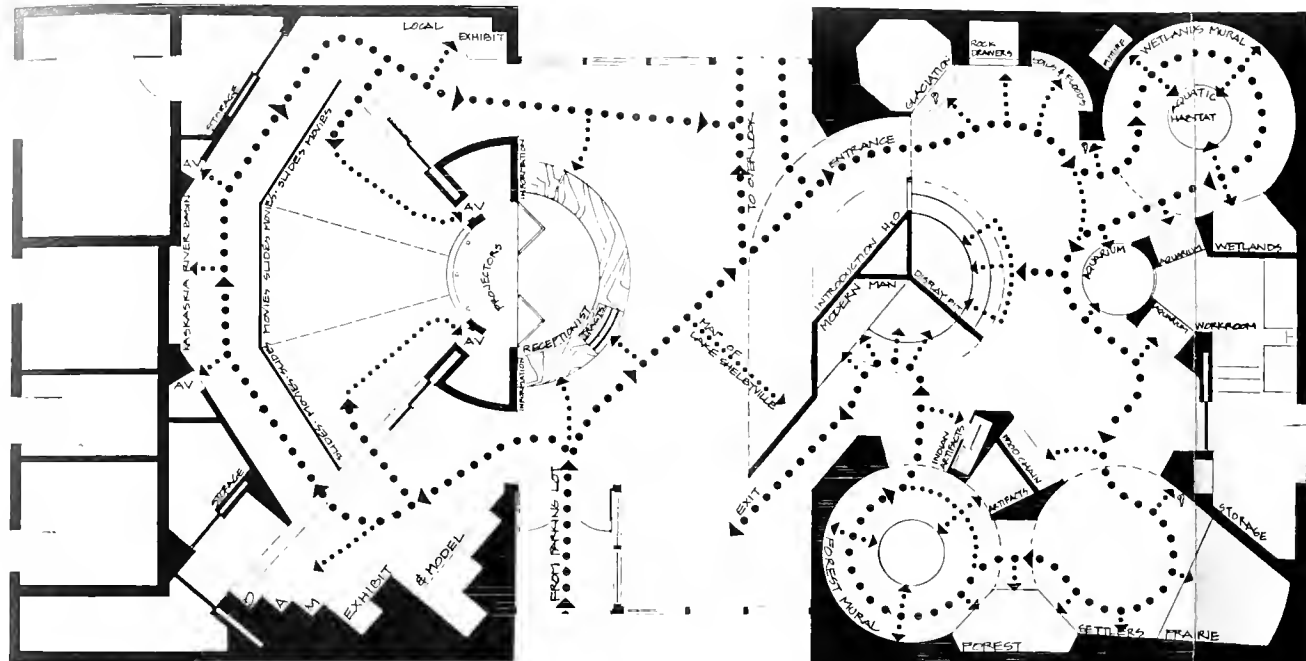
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SCHEMATIC FLOW DIAGRAM

FIGURE 6

AUDIO-VISUAL AREA-

Flexibility is the key to this area so it can be modified easily to handle larger groups. For normal attendance, the mini-theater is designed to serve 20-25 people. For classes or other special groups, the area could be expanded to a capacity of 60 people. This flexibility is achieved by providing movable projection screens which can be moved back.

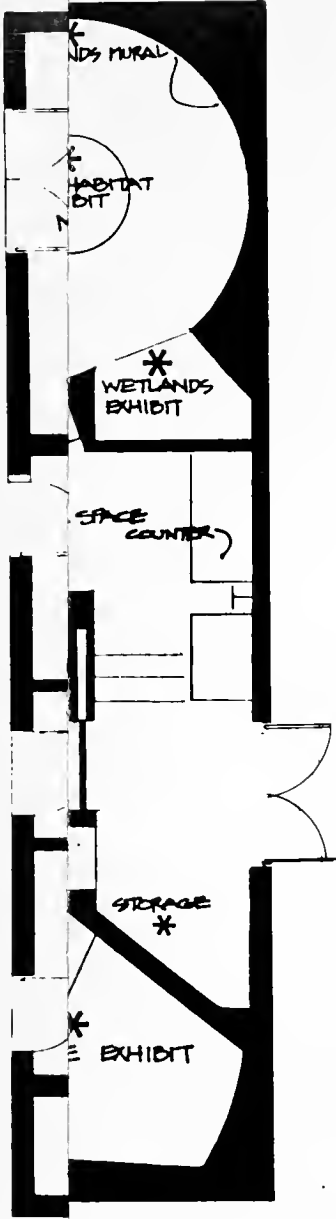
Seating would be on stackable chairs.

There is the capability of a 3-screen multi-image projection, single screen projection or back-screen projection on smaller A-V projectors. Use of these alternative methods provide a great deal of flexibility for future A-V programming.

The story line and slide sequence for the initial one-screen slide program has been prepared and is found in Appendix B. This program would provide a basic presentation on Lake Shelbyville and the Corps involvement. With a dissolve-unit, this slide sequence will be an interesting program. Plans should be made for development of a multi-screen presentation in the future.

Initial thoughts and discussions for the utilization of the A-V area ruled out exhibits because of conflicts between the viewer of exhibits and the viewer of A-V presentations. However, after the schematic floor plan began to evolve, it became apparent that there was sufficient space to consider some additional exhibit space. The corridor behind the projection screens was also viewed as providing more flexibility in circulation when the mini-theater is set up for its minimum capacity. Therefore, exhibits on the dam design and construction are proposed. Also, a changeable exhibit by the County Historical Society or other organizations could create good community public relations and provide other story elements.

Most of the A-V equipment will be located immediately behind the information counter and readily accessible to the attendant. Most of the A-V presentations would be remotely operated with the tapes and controls located at this focal point.



EX

EXHIBIT DESCRIPTION AND SKETCHES

The specific story elements and exhibit alternatives were developed both during and after the story line for the exhibit area was being developed. The story elements give the basic background of what is to be brought out in a particular exhibit. A few of the exhibits were developed as continuations of other exhibits so not all necessarily have related story elements.

STORY ELEMENT - WATER RESOURCES

Water is a precious resource which must be carefully husbanded and wisely utilized. The lands related to water bodies created as multi-purpose projects, such as Lake Shelbyville, are also important for recreation, esthetics and wildlife habitat.

The water cycle is represented in the Kaskaskia River Basin by rainfall in the upper reaches flowing through the Basin drainage system into Lake Shelbyville. Some water is passed on through to supplement other elements of the Basin system, while evaporation and transpiration return water to the atmosphere to fall again as rain.

The water related to Lake Shelbyville can provide-

- recreational activities
- industrial and domestic water supply
- aquatic habitat conservation
- flood control
- low flow augmentation for navigation

EXHIBIT - WATER - A PRECIOUS RESOURCE

"Water - a precious resource" is the entrance display which is intended to set the theme for the series of displays to follow. The emphasis is on water and what has been done with water here at Lake Shelbyville.

In a simplified way, there should be shown a cloud made out of a plastic material from which a shower of rain falls at a set period of time, like at five-minute intervals. The water falls below into a catch basin which runs down to a stylized lake. Some of the water will be pumped out of this lake and back up into the cloud for rain purposes at the next five-minute interval.

This display is to be open, not enclosed. Persons can come up as close to the water as they desire. Within the lake there might be some miniature ducks, boats, herons, etc. On the background there should be in more detail sketches depicting the things that are associated with Lake Shelbyville, namely, (1) the lake environment, (2) the wetlands or shorelands around the lake, (3) the recreational use of the lakes, (4) the forest or upland, (5) water for nearby communities and industries.

For example:

1. The "lake view" could depict a fisherman in a boat or an individual water skiing.
2. The wetlands or shorelands should indicate the wet edge of the lake with ducks, herons, and shorebirds related to its management.
3. The recreational use of the uplands could show camping which is one of the most popular forms of recreation.
4. The forest or upland area should indicate a heavy forest with upland game as related to the game management program.
5. The water conservation for communities would indicate a small town with one or two water towers. Included in this would be a notation that the lake serves for flood control and low flow augmentation in the Kaskaskia River.

WATER

a precious resource



STORY ELEMENT - GLACIAL HISTORY

Thousands of years ago much of northern North America was covered by huge glaciers. These glaciers, which advanced from centers in Eastern and Central Canada, developed when the mean annual temperatures were quite a few degrees lower than today, and the winter snows did not completely melt during the summers. After many years a sheet of ice accumulated that was so thick its weight caused it to flow outwards, carrying with it the soil and rocks on which it rested and over which it moved.

The glaciers scraped and smeared the land forms they overrode, leveling and filling many of the minor valleys and even some of the larger ones. Moving ice carried colossal amounts of rock and earth, for much of what the glaciers wore off the ground was incorporated into the moving ice and carried along, often for hundreds of miles.

The Pleistocene Epoch or "Great Ice Age" began more than one million years ago and ended about seven thousand years ago. During this epoch, there were four major ages of glaciation, each followed by a long interglacial age characterized by climatic conditions much as they are today.

The last and most recent glacial age in Illinois was the Wisconsinian, which began about 75,000 years ago. One of the frontal advances, the Woodfordian, came southward from the Lake Michigan basin to the present sites of Shelbyville, Decatur, Charleston and Peoria.

The particular significance of the Shelbyville moraine is that it marks the line of maximum southward advance of the Wisconsinian glacier in Illinois. The topography of the Shelbyville area is mainly the result of the deposition of the "glacial drift" by the glaciers and the subsequent erosion and stream dissection of these deposits after the glaciers wasted away. The melting of the continental ice sheet provided a tremendous volume of water that eroded and transported the sediments.

The City of Shelbyville is situated at the base of a prominent extension of the Shelbyville moraine. The dam for Lake Shelbyville is located at the edge of the terminal moraine.

Man postdated the glacial period in this part of the world; however, animals such as the mastadon were part of the scene. Mastadon bones have been found in the Mattoon area.

EXHIBIT - SHELBYVILLE GLACIATION

This exhibit is to be done as a diorama or miniature. Much of the display is a thick glacier, disappearing in the background. At the front edge of the glacier, rubble is being piled up in the form of soil and rocks, but in places water is melting below the glacier and a stream is flowing southward or outward. This stream is the Kaskaskia River. At the edge of the glacier there are tundra-like conditions. In this tundra could be shown a mastadon and a mammoth. It is necessary to convey in this exhibit the coldness of the region, the barrenness with no trees and only

some bushes and short tundra, the accumulation of dirt on the glacier, both on it and at the edge of it, and the water running out of the glacier at its lower edge and cutting away through the tundra to form a river and a river-valley.

In the foreground on the moraine, there should be a distinctive object that marks the relative spot where this building is now located. If possible, there could be a lighted spot indicating that this represents the present building. This light could remain on all the time.

NARRATIVE FOR EXHIBIT

The ice mass which covered Illinois off and on over a period of almost 1,000,000 years was almost beyond imagination. It was estimated to be up to 1,000 feet thick. Just think of the weight!!

As the weather got colder during these periods, it kept adding more snow and ice which caused the glaciers to move slowly south. Because of the weight, the glaciers gouged out rocks and soil and moved them ahead of and underneath itself for hundreds of miles.

A terminal moraine is the result of this material being moved ahead of a glacier and then left as the glacier melted and receded. You are sitting on the "Shelbyville Moraine" near its edge. The melt water of the glacier cut out the Kaskaskia River Valley and sliced through the moraine at this point.

The animals you see in the foreground (mammoths, mastadons, and other animals) existed at the time of the glacier. Bones of these gigantic animals have been found in the Mattoon area, just east of here.

The location of the dam for Lake Shelbyville was partly determined by the Shelbyville Moraine and the Kaskaskia River Valley, direct results of the glaciers.

EXHIBIT - GEOLOGY, MINERALS AND SOIL

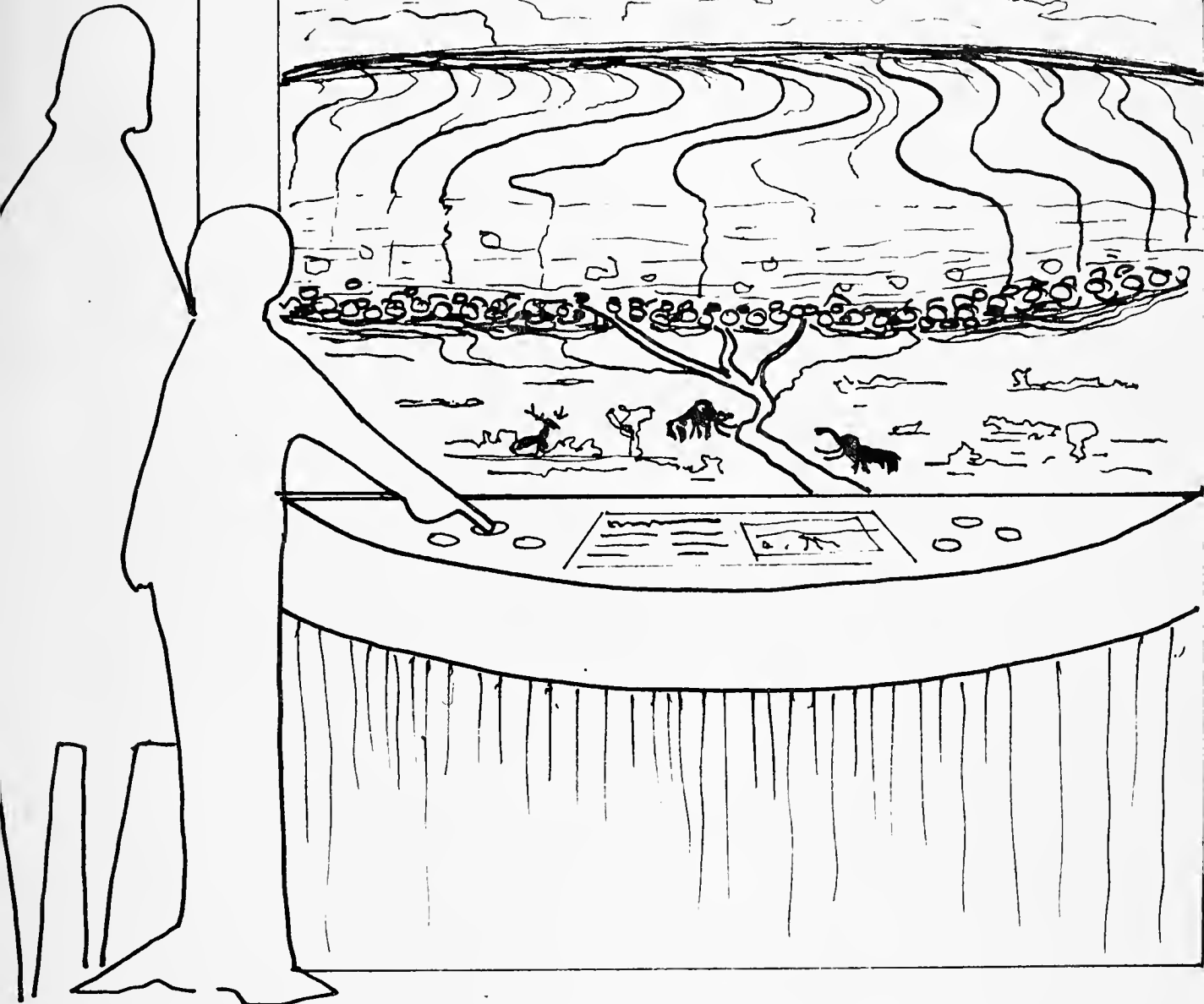
These displays would be in sliding drawers which could be used by visitors who were interested in more detail on these areas. They required less space in drawers than on wall or other type exhibits.

Drawer 1--Samples of common minerals of Central and Southern Illinois. Brief description of each. Possible source is the State Geological Survey.

Drawer 2--Soil profiles with explanation of differences between prairie, forest, flood plain and glacial moraine. Possible source is the Soil Conservation Service.

Drawer 3--Soil samples of common soils of this area. Source is the Soil Conservation Service. Explanation of how this affects man's efforts (at building, farming, trails, etc.)

GLACIATION BIRTH OF A RIVER VALLEY



SHOWING: GLACIAL MASS - FORMATION OF VALLEY - RIVERS -
TERMINAL MORaine - TUNDRA - PLEISTOCENE MAMMELS.

←  SIDE VIEW

GLACIATION DIORAMA

Drawer 4--Geologic maps of Illinois. Enlargement of the upper Kaskaskia River Basin and Lake Shelbyville Area, related to glacial display.

Drawer 5--Core samples for dam area, bedrock, coalmines, etc. Explanation of coal mining history and operations in the area and how this affected dam construction.

Drawer 6--Other subjects to be developed. Suggest fossils, glacial material.

Suggested size--30 inches long in front and 20 inches wide into the wall and 2-3 inches in depth depending upon the material to be displayed.

The top drawer should not be more than 32 inches off the floor so younger children can see the entire drawer. Therefore, if six drawers were installed, the bottom drawer would be between 14 inches and 20 inches off the floor.

Each drawer or tray would have a full or partial plastic or fiberglass cover to protect the displays. A modified drawer will be made for trays containing rock, mineral or core samples. This tray would be partially open and facilitate participation by touch.

EXHIBIT - FLOODS AND SOILS

This exhibit would be on a stylized drawing of the Kaskaskia River Basin. It would depict the role of the Corps in water and soil conservation.

Back Lighting - Light A series legend and leave on while A series pictures are lighted in sequence - Follow with B series in the same manner.

A - Legend

Every year destructive floods cause millions of dollars in damage and wash millions of tons of precious top soil off the land. Runoff may start small, but can soon become a raging torrent, creating extensive erosion and damage within a normal river flood plain.

Pictures

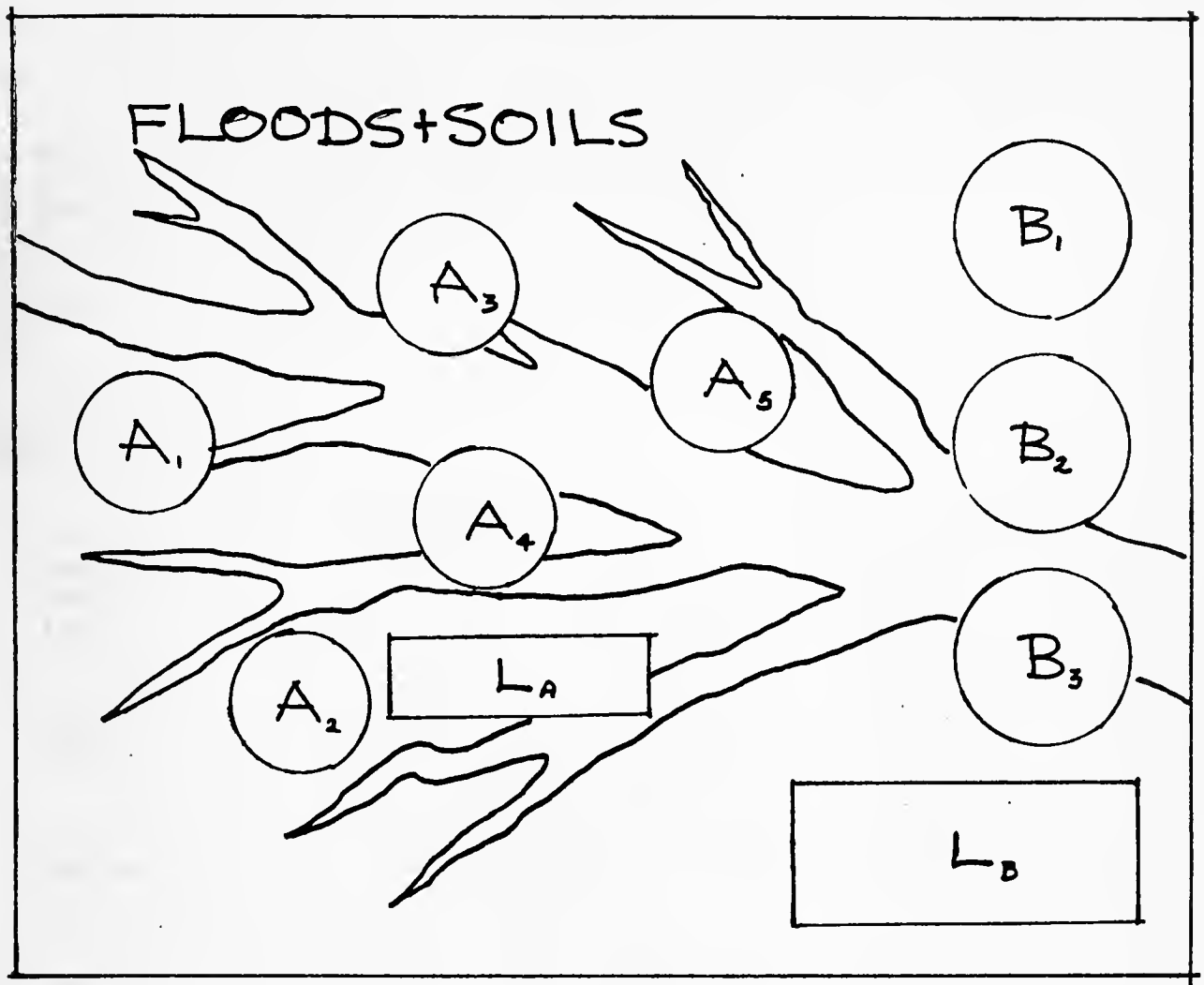
- A1 - Small flooding from an upper watershed area
- A2 - Deep erosion cuts
- A3 - Water damaging a structure
- A4 - Silt clean-up after a flood
- A5 - Flooding across a large flood plain

B - Legend

The Corps of Engineers has worked to reduce flooding and rapid water run-off in a river basin by constructing projects like Lake Shelbyville. Through a comprehensive water control program, water can be stored in the lake for slower release over a period of time while also providing for recreational use.

Pictures

- B1 - Construction picture of the dam
- B2 - Water flowing out of dam at moderate rate with fisherman below
- B3 - Recreational use of lake (boating, fishing, swimming)



AIR SHOT OF FLOOD PLAIN (OR STYLIZED DRAWING)

A = BACKLIGHTED PHOTO'S OF DESTRUCTION & EROSION.

B = CORPS PLANNING & PREVENTION.

L = BACK LIGHTED LEGENDS.

FLOOD & SOILS EXHIBIT

STORY ELEMENT - AQUATIC HABITAT

Lake Shelbyville and its tributaries support adverse population of fish, waterfowl and amphibians. Fish in the lake include minnows, crappie, walleyed pike, bullhead, readeare, sunfish, carp, large-mouth bass and catfish. Most of these varieties either did not exist prior to the lake or were found in very limited numbers.

Fishing is one of the most important recreational pursuits on the project.

The lake surface is also used for a wide variety of recreational activities.

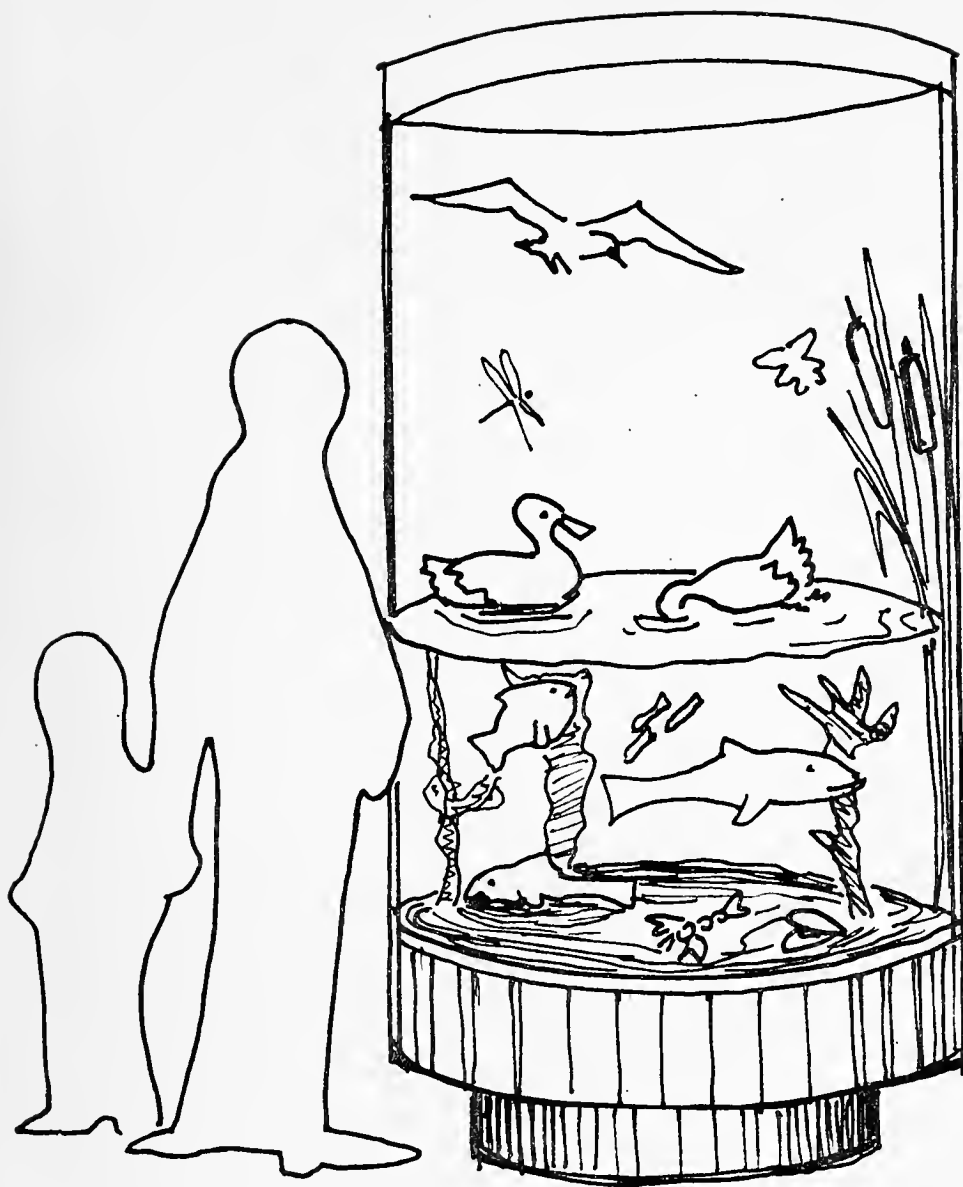
EXHIBIT - AQUATIC HABITAT

This is a circular display approximately four feet in diameter and eight feet high. This would be made of a heavy, clear lucite or plexiglas. The bottom part of the display will have an underwater scene of Lake Shelbyville. In this, there will be taxidermy mounts of fish: two sunfish, two crappie, two walleye, several minnows, a crayfish and a turtle.

On the surface of the water (a plexiglas divider) would be two ducks. One kind would be a dabbling duck and the other would be a diving duck. Suspended above this will be a hovering, ring-billed gull.

The viewer should be able to look through the abovewater part of the display to the circular mural showing the shoreline. This would fit in well with the aquatic display so there does not have to be any great amount of vegetation within the aquatic display.

A backlighted outline sketch of the display at a reduced scale will be provided. This will consist of a reproduction of the display with silhouette of the fish, birds, etc., and their names superimposed.



4'-0" DIAMETER - 8'-0" HIGH.

SHOWING:

GULLS

DUCKS

INSECTS

FISH

AQUATIC PLANTS

AQUATIC HABITAT

STORY ELEMENT - SHORELINE COMMUNITIES

The shoreline zone is an area where water and land meet at the reservoir edge, in marshes and along streams. Because this is an "edge" type of habitat and because all animals need water for survival, many diverse species can be found existing in or near a shoreline community.

The most common plants found along shorelines are horseweed, smartweed, sedge, arrowhead, cattail and buttonbush. These plants are valuable as a food source for wildlife and provide shelter and nesting cover for various animals.

Amphibians use ponds, standing water or lake backwaters for laying eggs. Permanent water bodies are necessary for other species either because they spend their lives in the water, like mudpuppies; around pond banks, river banks, or lakeshores, like bullfrogs and spring peepers; or because they overwinter on the bottom of water bodies like leopard frogs.

Some reptiles such as snapping turtles, painted turtles and water and garter snakes live in and around the shoreline permanently, but most only come to these areas when amphibian or invertebrate prey species are present. The most common invertebrate prey species are present. The most common invertebrate species associated with this community are dragonflies and damselflies, but most other insects are also represented here.

Mammals use shoreline zones as a source of drinking water and as a source of prey. Since mink and weasel require quantities of free water surface, they tend to remain close to ponds and other open water. Carnivores, including skunks, opossums, raccoons, minks and weasel frequent the area during spring and summer when they can prey on amphibians and waterfowl young.

Waterfowl of all types use the shoreline for nesting and early rearing of their young. They need to be close to protected water areas for food and safe places to train their young.

This area is probably the most important zone since it affects the lives of animals, waterfowl and fish inhabiting the uplands and the reservoir.

Man relates to the shoreline for uses such as hunting, fishing, photography, swimming and esthetic enjoyment.

EXHIBIT - SHORELINE COMMUNITIES

This wall leading up to the exhibit on wetlands will consist of a photographic continuum that extends from floor to ceiling that show the shoreline and wetlands of the lake. This will include appropriate shoreline habitat such as grass, tules and shrubs related to the waterfowl management.

Water will be shown in front of the shoreline so that this would tie in with the aquatic display which is in front of this panorama.

EXHIBIT - WETLANDS OR SHORELINE PANORAMA

Two different types of displays will be used to indicate the shoreline communities around the edge of Lake Shelbyville. One will be the photographic mural described above and the other will be a panoramic scene showing the plants and waterfowl near the edge of the lake.

The panoramic display will have sufficient depth to show plantings of milo or maize with a Canadian goose in this feeding area. On the background will be painted additional Canadian geese and a duck. To one side of the displays there will be some taller cattails and in this there will be a redwing blackbird. At the base of the cattails a dragonfly and other large insects will also be used.

On an adjacent wall a backlighted silhouette of the panorama with the various elements named will be placed. A short description of the waterfowl management program will also be included.

EXHIBIT - TOUCH AND SMELL CORNER

This will be a changeable exhibit to take advantage of the seasonal opportunities or new things discovered on the project which will provide touch and smell sensations and arouse these senses. Items will be placed on the low counter and hung on the walls forming the perimeter of the area. Several seats will provide an opportunity to spend extra time for those particularly interested in the items.

Examples -

A section of deer hide with hair left on and a piece of tanned buckskin for easy comparison

A piece of mastadon or mammoth bone to feel and handle which would tie in with the glacial display nearby

Sassafras root - smell

Wild onions or leeks (seasonal) - smell

Different woods with bark on and finished surfaces to feel, many also have distinctive smells

It would have to be determined whether items could be left completely unsecured or have some type of small cable, rope or other attachment.

Storage under the counter would provide for rotation of some items and a place to keep spare items which might wear more rapidly.

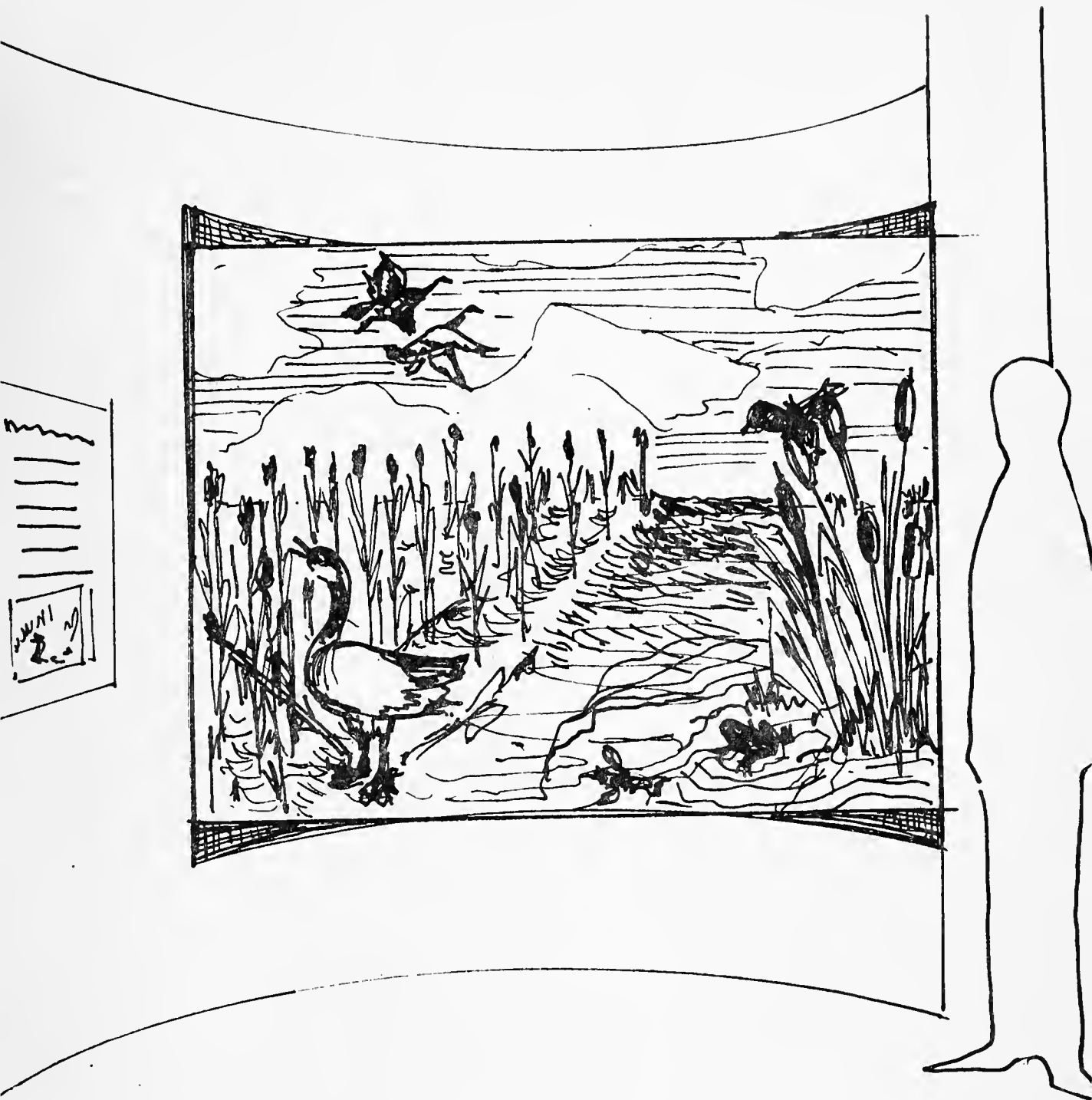
The open pit would be used for snakes, turtles and other amphibians which could merely be observed by visitors or handled with an interpreter. The pit also has future capabilities for a stationary dry exhibit.

EXHIBIT - AQUARIA

The aquaria exhibit will include five glass tanks showing different fish, amphibians, reptiles or other aquatically related displays. They may also include local plants, herbs or wildflowers in a micro-climate setting. A large circular tank four (4) feet in diameter will be the focal point of the exhibit. It will be flanked on each side by two (2) rectangular tanks stacked one over the other. The smaller rectangular tanks will provide the greatest flexibility for changeable exhibits.

All of the tanks will be accessible from the work area behind. There will be storage, a work table, water outlets and necessary equipment or instruments kept in this space.

The narrative for these displays will have to be developed after the definite displays, species, etc., are determined. The narrative will have to be changed whenever the exhibit changes.



MANAGEMENT PROGRAM - PLANTINGS
WETLAND - BIRDS + ANIMALS.
CATTAILS, SMALL ANIMALS AT POND EDGE.

WETLANDS HABITAT

STORY ELEMENT - FOOD CHAIN

A food chain is the transfer of food energy from the source in plants through a linear series of organisms with stages of eating and being eaten repeated many times. Food chains are an important concept in properly understanding interrelationships between organisms in any ecological community.

The base of the food chain is formed by green plants or "producers" utilizing energy through the process of photosynthesis. A second level is made up of herbivores who are animals living only on plants as primary consumers. Secondary consumers are carnivorous animals that prey on herbivores, comprising the third level and a fourth level is formed by omnivores or tertiary consumers who eat plants, herbivores and/or carnivores.

At each transfer of energy from one organism to another, or from one level to the next, a large part of the energy is lost in the form of heat. The shorter the food chain, or the closer the organism to the beginning of the food chain, the greater the available energy. Because of this reduction in available energy as progression is made, food chains usually cannot be any longer than five links. Also due to the energy reduction, each progressive level contains fewer individuals than the level before it.

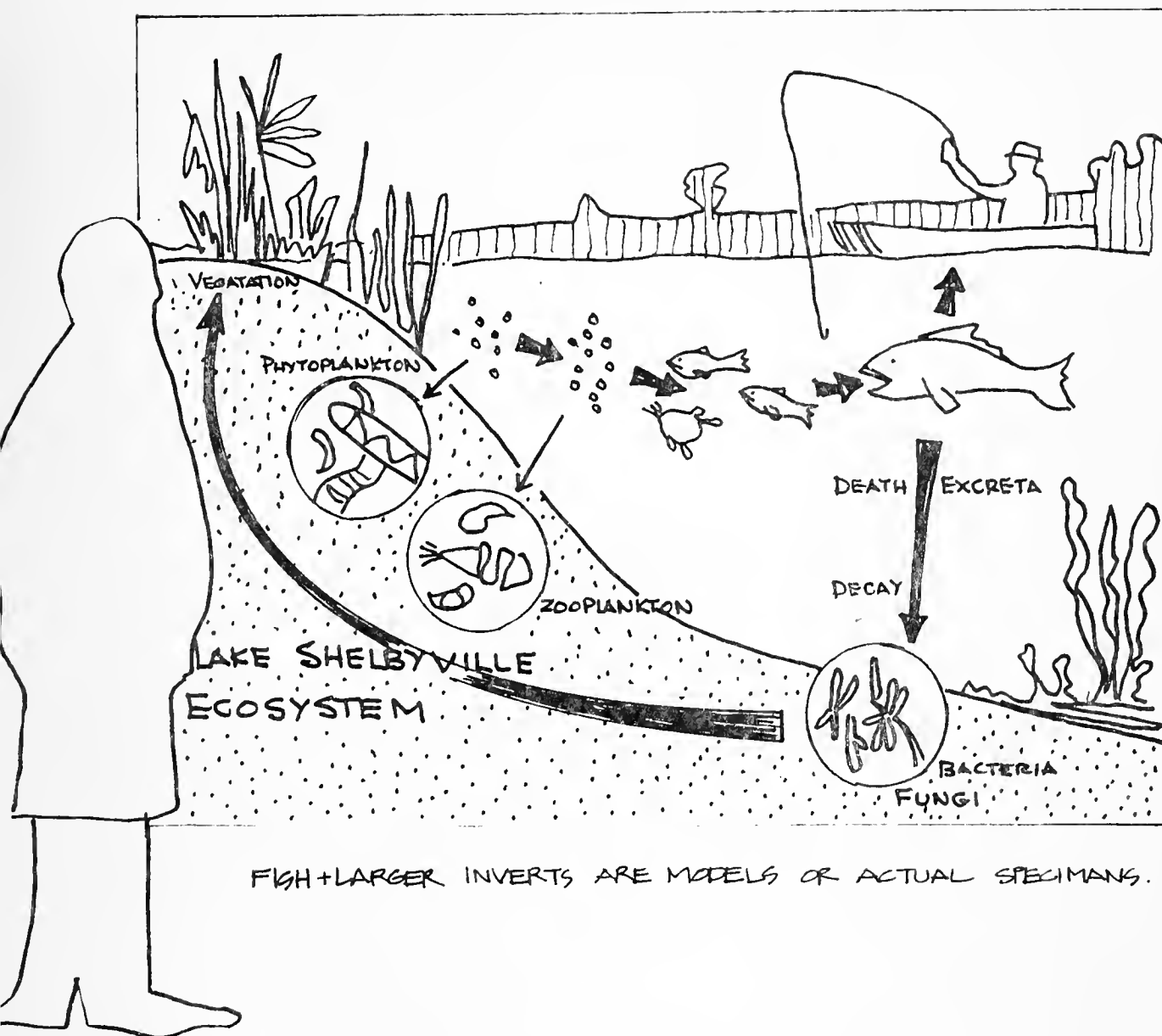
For example, at Lake Shelbyville a land-based food chain might be: seeds, mouse, snake, hawk. There are uncountable seeds, more mice than snakes, more snakes than hawks. A water-based food chain might include: phytoplankton, minnows, crappies, bass. The process starts with a broad base of the plants and tapers to a relatively narrow top creating a "food pyramid."

EXHIBIT - FOOD CHAIN

The following narrative could be a backlight panel in a corner of the exhibit or along side it. A lake and the surrounding area is a complex community of organisms. Microscopic plants (phytoplankton) which produce their own food are consumed by microscopic animals (zoo plankton). Both are consumed by tadpoles and small fish which are eaten by larger fish. The larger fish are caught by man, consumed by other birds or animals or die and are decayed by fungi and bacteria. Thus, the nutrients will be used by green plants in the recycling process to produce their own food.

Excessive amounts of pollutants (sewage), toxicants (industrial or agricultural chemicals) or fertilizers introduced into a system can kill or adversely affect some of these food chain elements. This causes the natural cycle to be disturbed and the normal balance of nature to get "out of phase." The actual exhibit would be relatively shallow with the lake-related scene treated as a cross-sectional view. The case would have dim lights with spotlights sequenced to take a visitor through the food chain depicted.

Since micro-organisms cannot be shown in scale they could be enlarged and backlight to better portray their form. Other elements of the chain will be mounts or authentic paintings of the fish, etc. A man in a boat fishing in the distance is important as an ultimate element in the food chain.



FISH + LARGER INVERTS ARE MODELS OR ACTUAL SPECIMANS.

SHALLOW EXHIBIT - TREATED AS CROSS SECTION.
 BANK & LAKE BOTTOM IN RELIEF. PAINTED BACKGROUND.
 DRAWINGS OR BACK-LIGHTED PHOTOS OF MICRO-ORGANISMS.

FOOD CHAIN EXHIBIT

STORY ELEMENT - FIELD AND PRAIRIE COMMUNITIES

Except for a band of trees along the rivers and water courses and scattered groves, most of the present farmland was once part of a vast prairie system. Small remnants of this important eco-system, so important to the heritage of the region, still remain. More normally, prairies now have to be re-established from remnant seedings.

Many old fields in the area which have been removed from active agriculture are in various stages of succession. They are undergoing rapid changes and a wider variety of invertebrates, mammals and birds have been introduced to the area as a result of increased habitat.

Wildlife management programs of the Corps of Engineers are designed to further enhance wildlife habitat through plantings of native materials and other means.

Hunters, wildlife observers, photographers, hikers, riders and interpretive programs make use of the field areas.

EXHIBIT - THE PRAIRIE

Narrative

"Much of Illinois was once covered by a great "sea of grass," referred to by some as "Grand Prairie." The prairie was basically level with clumps of trees found generally along water courses, which were few and far between.

The prairie had a unique ecology which included many interesting types of plants and animals. This exhibit shows only a small but interesting cross-section of things which would have been found in the prairie. The tall and short prairie grasses and flowers were typical of the spring flora of the prairie.

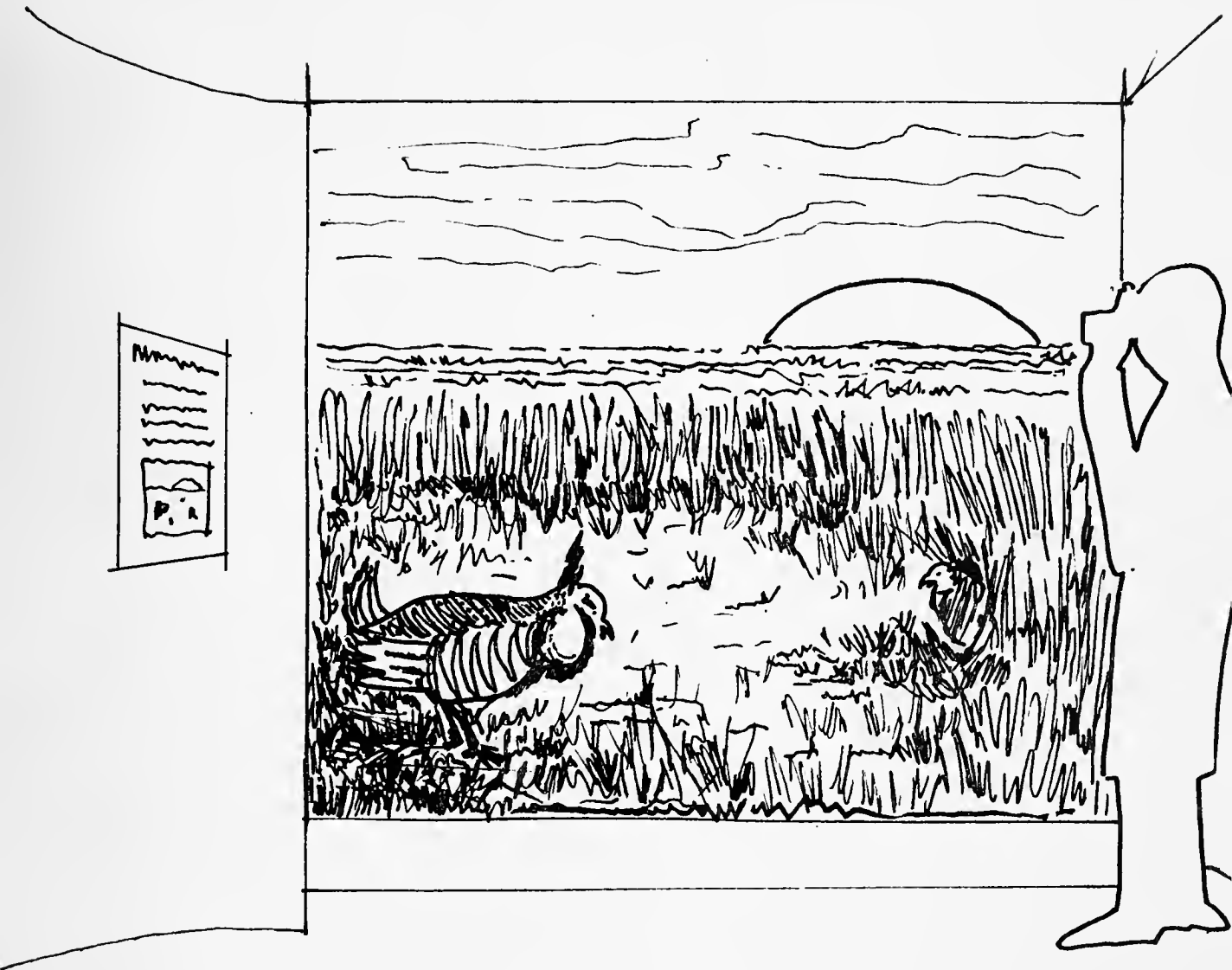
One of the most interesting birds in the prairie was the Prairie Chicken. It was noted for its unique mating ritual which included puffing up the colorful air sac, doing a dance and fluttering its wings rapidly to produce a "booming" sound. The males (cocks) "staked out" their territory and attempted to attract the females (hens) into their domain for mating."

This display has considerable depth. In the foreground there should be a male prairie chicken in a "booming stance." This booming prairie chicken should look very much as the one illustrated in photograph 15762n (Illinois Natural History Survey). This prairie chicken should be in short prairie grasses, somewhat like the short prairie shown in photograph 11792. In the background there should be shown some tall prairie grasses that blend into other grasses painted on the background (see photograph 15762n). A light will be focused on the prairie chicken to indicate it is very early morning. A female prairie chicken will be at the edge of the tall prairie grasses.

Other animals to be shown: meadowlark and golden plover in the short grass, redwing blackbird in tall grass. A marsh hawk could be painted on the background. At the junction of the short and tall grass, a garter or other type snake will be located with two or three butterflies hovering. Appropriate spring prairie flowers will be included.

The main booming of the male prairie chickens occurs between March 20 and April 15 and the peak of the booming usually comes at sunrise. Therefore, the display will be designed for this time of year and this time of day. The male should be on a spot that is elevated a few inches. The actual booming sounds will be played intermittently over a speaker or the sound could be actuated by a sensor-mat in the carpet.

The sun, shown on the horizon, could be of frosted plexiglass with red backlighting, suggestive of a rising sun. If this cannot readily be accomplished, the sun disc can be reduced or eliminated. Spotlighting from low on one side is necessary to simulate a low-level rising sun.



SHORT GRASSES - TALL GRASSES - PRAIRIE CHICKENS -
SMALL BIRDS - SMALL MAMMALS - BUTTERFLIES - INSECTS.

PRAIRIE HABITAT (AT SUNRISE)

STORY ELEMENT - PRAIRIE TRANSITION

Father Marquette is reported to have written: "The vast stretch of prairie presents a picture as beautiful and awe inspiring as the first sight of the Great Lakes to the white man."

However, early settlers of the upper Kaskaskia River Valley found the prairies to be wet, formidable barriers to cross rather than the pristine farmland of today. According to workers on the Illinois Central Railroad in 1874, Champaign County was found to be "one vast pond with a green scum coated surface. Houses were surrounded by water which stood until covered with green slime--there were swarms of mosquitoes--there were epidemics of ague or autumnal fever (a form of malaria)." Mrs. Anna Pierce who resided in the Champaign area for over 90 years related that malaria was prevalent in Champaign and surrounding counties as late as 1900. In her childhood, she and other family members were afflicted with malaria every summer and fall. Roads were "liquid mud" through much of the year. There was little natural surface drainage so until the land could be properly drained, the rich black clay-loam soil was considered worthless by these early settlers. Immigrants from Holland and the Townlands of Germany who knew how to tile fields and build drainage ditches came in to conquer the "swamps" of the area. Early drainage work was done by hand or horse-drawn scrapper while later work on the major drainage ditches was accomplished by "floating dipper dredges."

The beautiful fields of Central Illinois are underlaid with thousands of miles of tile which carry off the excess waters via drainage ditches to river systems such as the Kaskaskia. Lake Shelbyville helps to maintain a stable flow in the Kaskaskia River to assist farmers throughout the Basin.

EXHIBIT - PRAIRIE TRANSITION

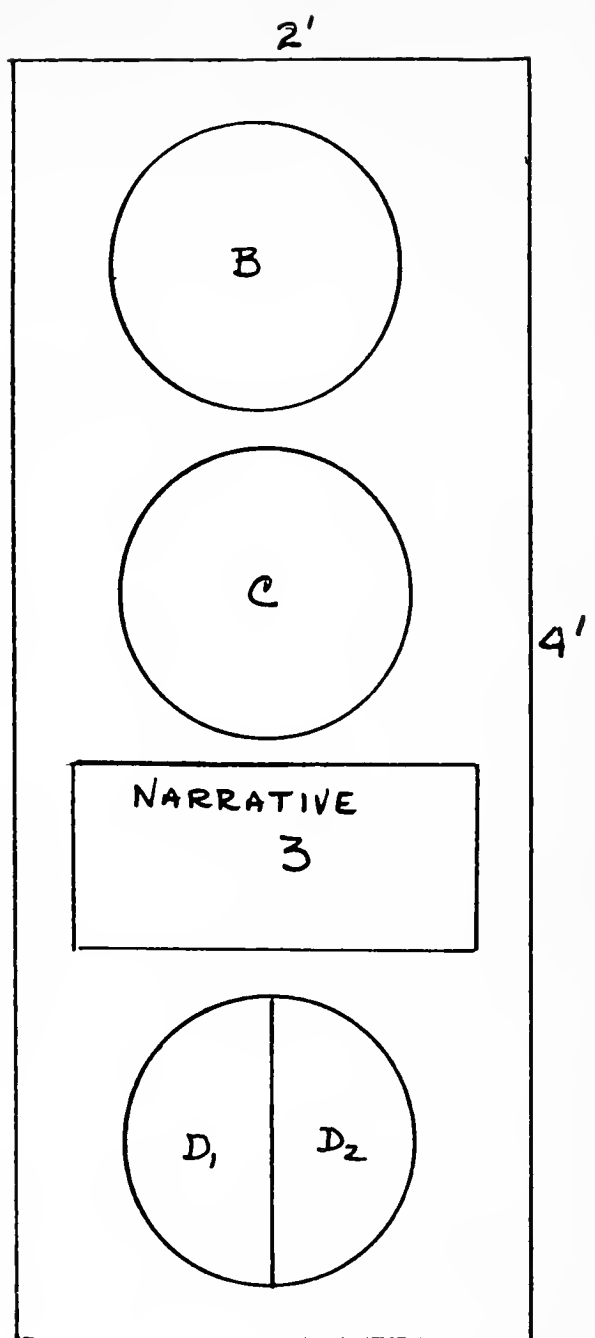
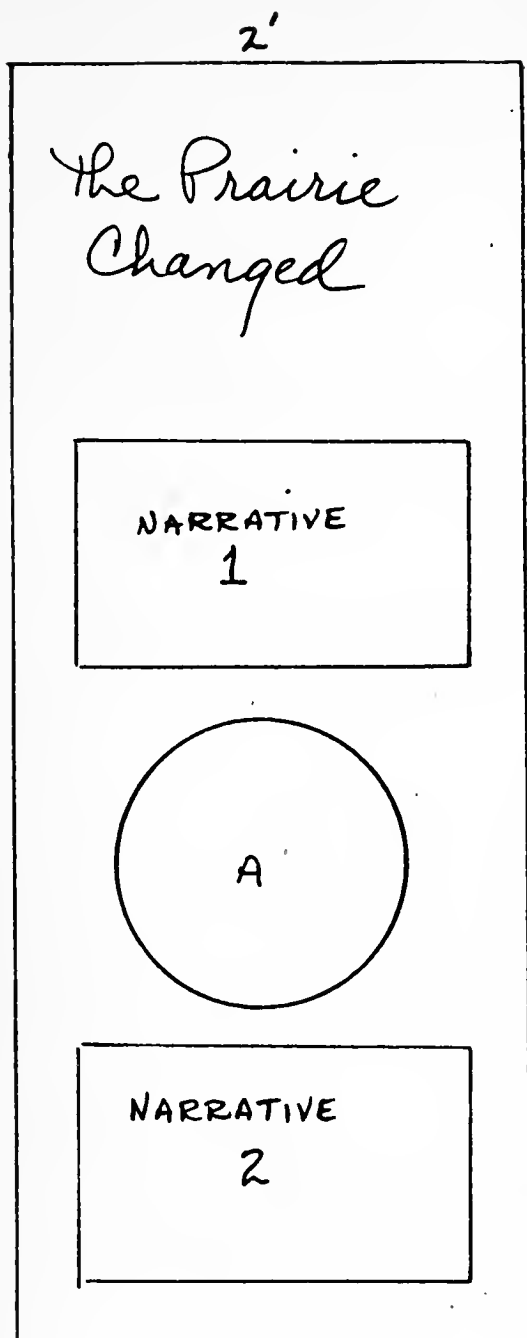
This exhibit will assist in "bridging" the visitor from the natural prairie before the settlers, through the early settlers' battles to convert the prairie and on to the present-day agricultural complex which exists in the area.

The exhibit will be on two panels, 2' wide and 4' high, with half-tone photographs and backlighted narrative boxes. The panels will be extended out from the wall about 6" on the left edges to provide a definite break from the prairie exhibit.

These narrative elements will plug into the numbered rectangles on the following sketch.

1. Very early settlers were unsuccessful in converting the prairie to farming because they didn't have the proper tools or knowledge--many gave up and moved on. About 1838 John Deere developed the steel, self-scouring plow which lead to the rapid breaking of the prairie.

2. Settlers in the upper Kaskaskia River Valley also had to fight excessive water because of poor drainage in the flat watershed. It was reported that some areas were "one vast pond with a green, scum-coated surface. Houses were surrounded by water which stood until covered with green slime--there were swarms of mosquitoes--there were epidemics of ague or autumnal fever (a form of malaria). Roads were liquid mud."
3. Immigrants from Holland and the German Lowlands who knew how to tile fields and build drainage ditches came to conquer the "swamps." Early drainage work was done by hand or horse drawn scrapper while later work on the major drainage ditches was accomplished by "floating dipper dredges" and today by drag lines. The beautiful fields of Central Illinois are underlayed with thousands of miles of tile which carry off the excess waters via drainage ditches to river systems such as the Kaskaskia River System, of which Lake Shelbyville is an integral part.



- A. Minature of John Deere and his self scouring plow
 - or a model of plow
 - or a picture of the plow
- B. Steam Dredge of 1900
- C. Dragline used Today
- D₁. A Drainage Channel
- D₂. Field Tiling in Process

STORY ELEMENT - FORESTS

The forest communities have a relationship to the field areas as trees invade the fields in the battle of succession. The oak forest probably dominates the Lake Shelbyville area with white and black oak, shagbark, hickory and ash predominant. As in most forest communities, many kinds of invertebrates inhabit the forest.

Many types of mammals are found in the forested area including fox and grey squirrel, raccoon, cottontail rabbit and white-tailed deer. A wide variety of birds also inhabit the wooded areas near the lake. The relationship of the forested land to the lakeshore and field edge provide an even greater variety of birds and mammals than would be expected in an area totally wooded. Some wildlife management is important on forested lands.

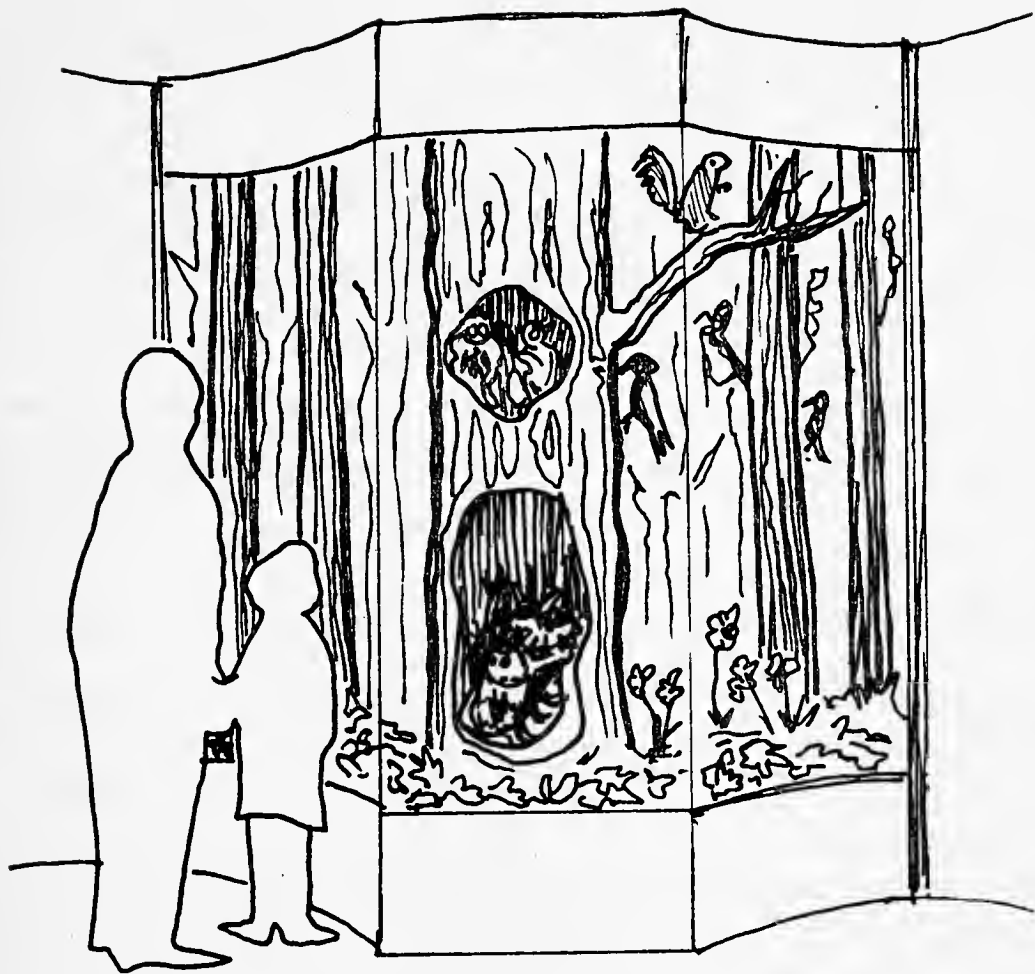
The forest not only provides shelter for birds and animals but for man also as the camp areas are oriented to the woods for shade. Many of the hiking trails go through the woods which provide for observation, nature study, photography and other related recreational uses.

EXHIBIT - FOREST OR UPLAND

This display is designed to have two viewing points. One will be of such a nature that the person will look directly into the hollow trunk of a tree where a raccoon and flying squirrel are nesting. The entire display will be done in natural size; therefore, the two types of animals will be life mounts. The interior of the tree should be very dark with a dim spot on the raccoon(s) and on the flying squirrel(s). This display is meant to show contrasts between the forest at night with some nocturnal creatures, and its changed personality and inhabitants during the daytime hours.

FOREST - PHOTOGRAPHIC PANORAMA

There will be a photographic continuum that covers the curved wall floor to ceiling, carrying forth a continuation of the forest theme that started in the panorama immediately to the left. This photographic continuum will show relatively dense forest, but at one place in the forest there could be shown trailers and campers, indicating a present use of the forest.



SHOWING:

GREY SQUIRREL.
FLYING SQUIRREL.
RACCOON.
WOODPECKER.
OTHER BIRDS.
SMALL MAMMALS.
WILD FLOWERS.
MUSHROOMS.

FOREST HABITAT

STORY ELEMENT - INDIAN HISTORY

The most significant site of Indian occupation in the Lake Shelbyville area was the "Jasper Newman" site on the east side of the Okaw River just above the confluence with the Kaskaskia River. A large permanent village occupied the site. It was a stockaded village with several pyramidal ceremonial mounds, a storage area and a residential (hut) area.

Carbon 14 dates range from 1210 to 1480 A.D. (ave. date of 1395 A.D.) for occupation of the sites investigated. During this period the Newman site was probably the social-political-ceremonial center of the upper Kaskaskia Valley. The Mississippian settlements in the Kaskaskia Valley were part of a structured network involving continuing inter-village relationships throughout the area.

The "Sweat Bee" site about one-half mile north of the Newman site was similar but apparently much less significant. Site diet was based on agriculture, hunting, fishing and gathering. Maize was the only recovered agricultural product. Fishing was relatively important with fresh water mussels and turtles also utilized.

Archaic Indian sites were small and scattered, restricted in distribution, occurring principally along the Kaskaskia River.

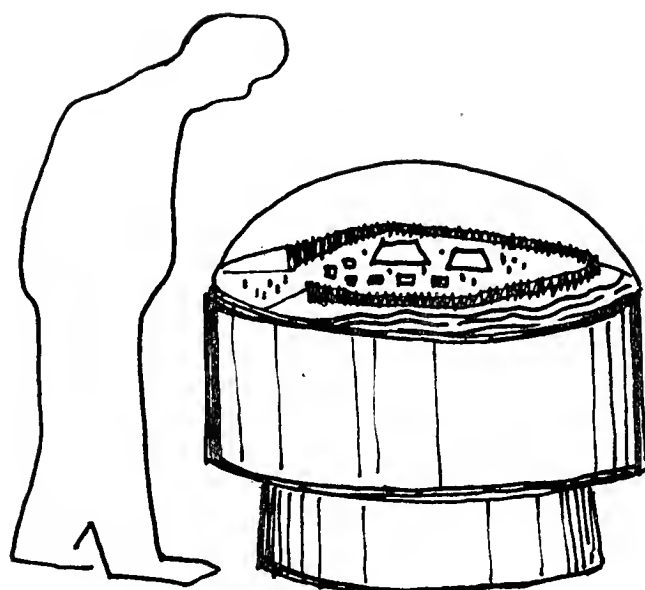
Late Woodland Indian occupation in the upper Kaskaskia Valley was not well represented.

EXHIBIT - PALISADED, MISSISSIPPIAN INDIAN VILLAGE

It is proposed to use as the basis of the diorama a reproduction or facsimile of Jasper-Newman Site which was located near confluence of Kaskaskia and Okaw Rivers. This stockaded Indian village was excavated and mapped by the University of Illinois by Dr. William M. Gardner under contract with the National Park Service and a report titled "The Mississippian Occupation in the Kaskaskia-Okaw Drainage" was prepared. It contains data on the details of the village and artifacts found.

Four push buttons or foot pedals would be utilized to highlight each of the following major elements by actuating a pinpoint light in the diorama and an information or "scholar" panel around the diorama. The major elements and related narratives are:

1. Palisade Palisaded villages were a trademark for this period of Indian activity. It was called the Mississippian Era because of the relationship to the river of that name. One of these villages, the Jasper-Newman site, occupied from the mid-1200's to the mid-1400's, was located about 10 miles north of there where the Kaskaskia and Okaw Rivers came together. The site was excavated before Lake Shelbyville covered it.



INCLUDING:

RIVER - PALISADE - TEMPLE MOUNDS - HOUSES -
HUMAN FIGURES.

INDIAN VILLAGE DIORAMA

2. Temple Mounds These villages contained one or more mounds of varying sizes that were used in their ceremonial and social gatherings. Some had structures built on top of the mounds.
3. Houses These Indians lived in permanent houses of various shapes and used similar structures for storing food they had gathered. They raised maize, gathered many types of nuts and berries and hunted and fished for their food.
4. The River The Kaskaskia River served the Indians of this time as the primary transportation route. They could float the river in their canoes much easier than crossing the prairie. It was also a source of food (fish, mussels and turtles) and water.

EXHIBIT - INDIAN ARTIFACT, PICTURES, ETC.

This exhibit will utilize a series of six to eight sliding panels actuated by push buttons, which will be designated with an adjacent name plate with one outline sketch etched in a panel next to the name. Each panel would have artifacts relating to the exploration of the Jasper-Newman Site and to other periods of Indian culture of this area. Flat objects such as arrow heads, spear heads, fish hooks and axe heads are particularly adaptable to this type of display. Pipes, small pottery and slightly broader material can also be utilized if panels are properly designed in advance to provide required depth.

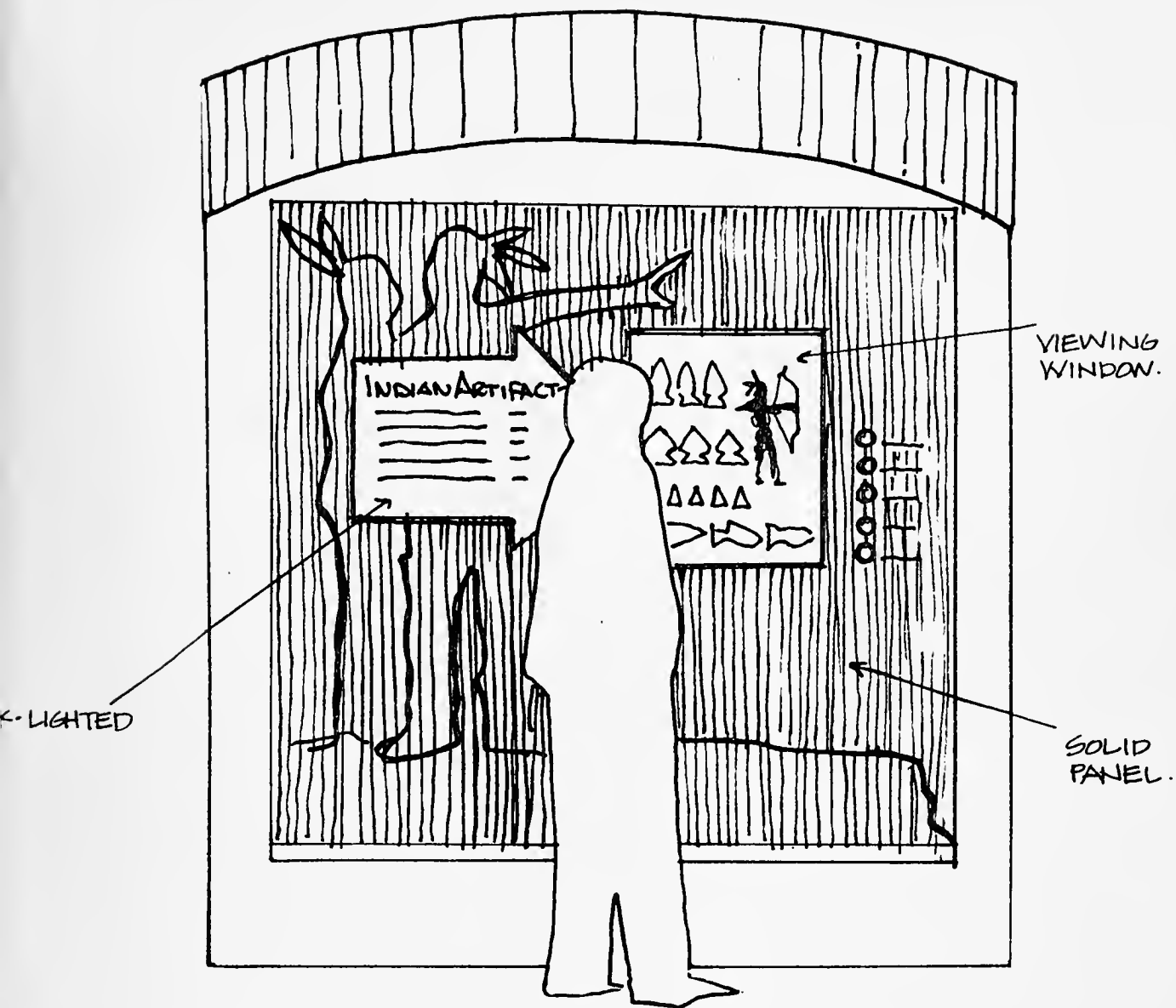
The sliding panel exhibit will require an area 6 feet high, 4 feet wide and 16-20 inches in depth. The panels themselves are about 2 feet wide and 4 feet high and can vary in depth from 1 to 4 inches depending on the material to be displayed. When a particular subject panel is desired for viewing, the button is pushed, the previous panel moves out of view behind a blank panel and the desired panel moves into the viewing position. The panels are moved by hidden arms which extend to the viewing position and retract to return it to the stored position.

This particular type of exhibit has been very effectively used at the St. Louis Museum of Science and Natural History. It was designed and fabricated in the St. Louis area.

EXHIBIT - INDIAN/SETTLER COMPARISON

The exhibit will provide a tie and comparison between the tools, methods and processes of the Indians and the early settlers. The final exhibit make up will depend to a great extent on the availability of artifacts which can be borrowed, purchased or reconstructed. As noted on the sketch, there can be comparisons between the shell hoe and steel hoe, stone axe head and steel axe, pottery and copper kettle, items of clothing, crops raised and types of shelters or houses.

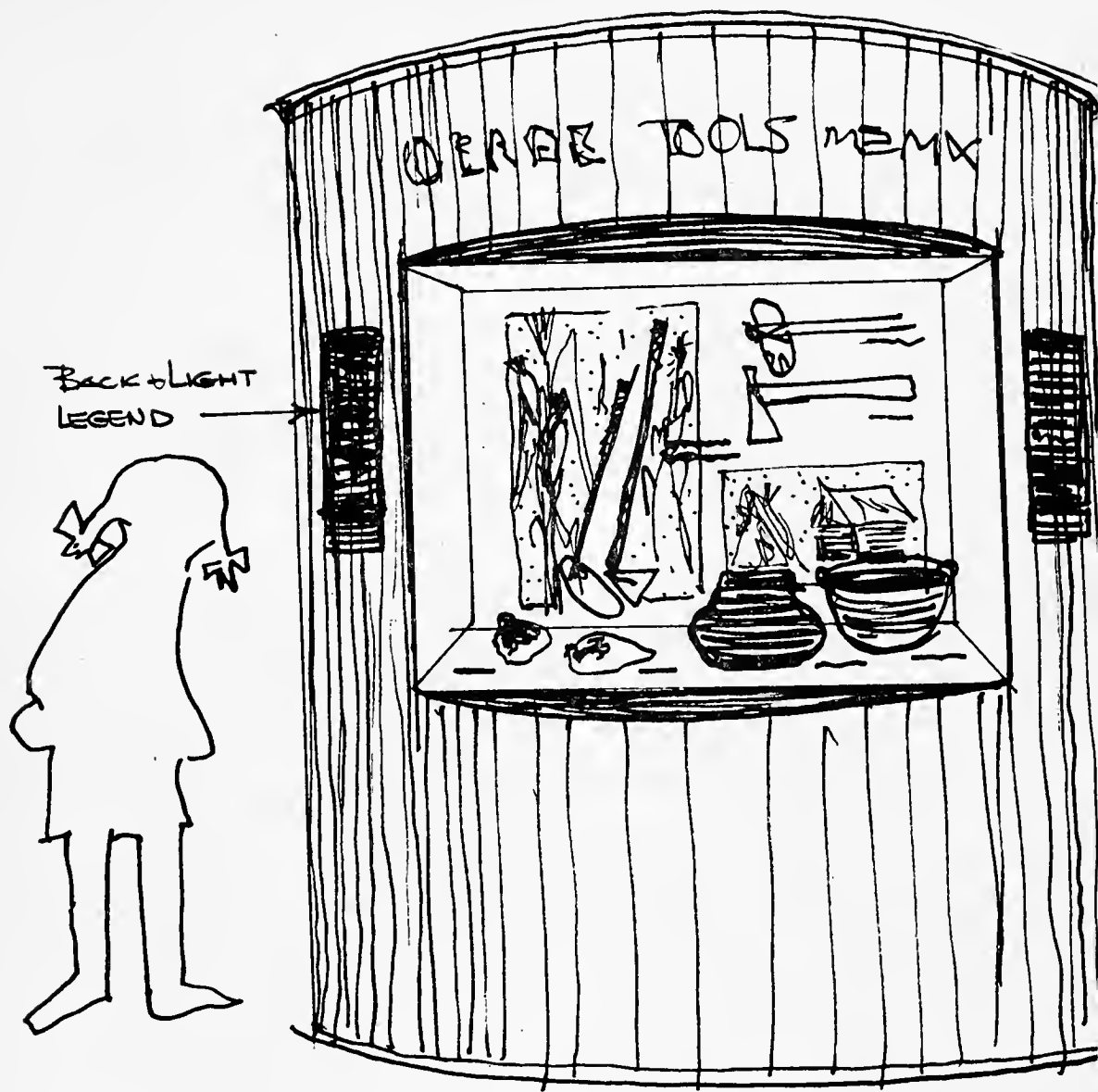
A qualified person in archaeology or Indian-settler culture should provide final input and design expertise so that the authenticity of the exhibit and the elements used are without question.



SHOWING ARTIFACTS ON SELECTION PANELS
VIEWED THROUGH WINDOW.

AUTO CHANGING THROUGH BUTTON SELECTION.

INDIAN EXHIBIT



COMPARISON OF INDIAN + SETTLER TOOLS:

SHELL HOE - STEEL HOE.

STONE AXE - STEEL AXE.

POT- COPPER KETTLE.

ETC.

PHOTOS COMPARING:

HOUSE TYPES - CROPS - CLOTHING - PROCESSES - ETC.

INDIAN-SETTLER COMPARISON

EXHIBIT - SHELBYVILLE - "THE CHAUTAUQUA CITY"

"Chautauqua" is the Iroquois Indian name for "gathering place." The shores of Lake Chautauqua in western New York state provided a gathering place for the Indians and later for the white man as the "modern" version of Chautauqua evolved.

Before the turn of the century and for some years after Chautauqua programs or assemblies were popular in Illinois and throughout the county. In 1901 Illinois led all other states in the number of Chautauqua Assemblies. People came from a wide area, many staying in tents or cottages which they brought or rented for a particular session. They came to hear the great orators, religious leaders and music of their time, to rest and relax and socialize with friends.

The Chautauqua Building still stands in Forest Park in Shelbyville but it isn't used as much as it was when the Chautauqua programs were popular. The other important Chautauqua site of the area was Lithia Springs, which is now a part of the Lake Shelbyville project. The mineral springs were widely known for their medicinal powers and miraculous cures because of "rare minerals," including lithium, from which the name Lithia Springs was derived.

Famous people who spoke at Lithia Springs and Shelbyville included William Jennings Bryan, Billy Sunday and Booker T. Washington. Mr. Washington said on the occasion of his last visit to Lithia Springs in 1903, "I have visited few spots anywhere in the world that possess such charm, nor such an influence for good in every direction as is true of Lithia Springs. I came to Lithia Springs because I believe in what you are doing here and in the way you are doing it. Because you are strong for reality, simplicity, getting down to nature. I'm glad to see your children get out where they can wade in the water, hear the songs of the birds and live near nature."

It was a great experience to be "going to Chautauqua," an experience of a bygone era. Research is underway to look into the interpretation and perhaps some restoration of the Lithia Springs Chautauqua area and thereby preserve another element of our past.

This exhibit will include the above narrative, programs, handbills and enlarged pictures from the Shelbyville and Lithia Springs Chautauquas.

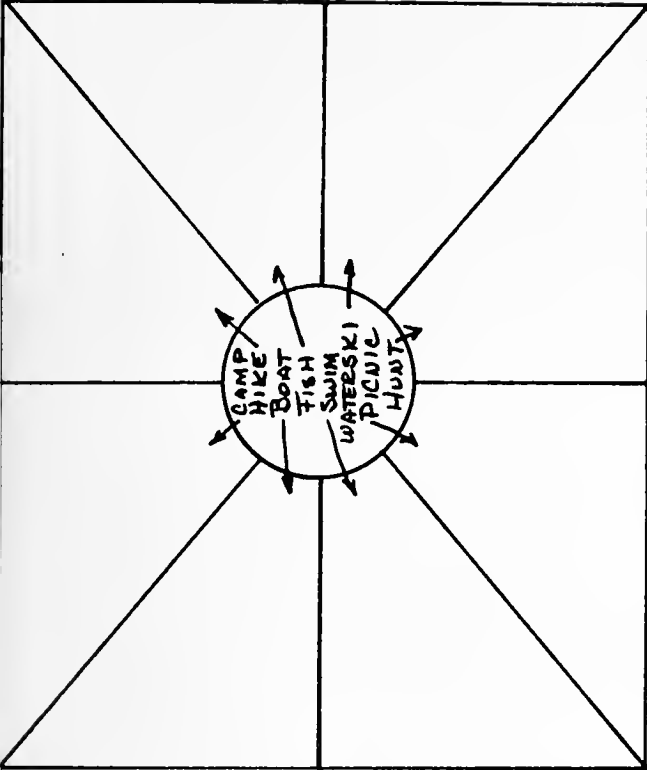
LAKE SHELBYVILLE
CAN BE USED BY YOU
IN MANY WAYS

CHANGEABLE
PANEL

THIS AND MANY OTHER
PROJECTS OF THE US ARMY
CORPS OF ENGINEERS
ARE AVAILABLE FOR
YOUR ENJOYMENT



RAISED LETTERING &
CORP SYMBOL TO
CREATE SHADOW PATTERN



BACKLIGHTED COLOR TRANSPARENCIES
OF NOTED ACTIVITIES

STORY ELEMENT - DAM CONSTRUCTION

The Lake Shelbyville dam was constructed on the main stem of the Kaskaskia River, 222 miles upstream from its confluence with the Mississippi River. It created a lake of 11,100 surface acres of water at normal pool.

The dam is located on the edge of the Shelbyville Moraine, formed by the most recent (Wisconsinian) glaciation. (Tie this in with Element-Glacial History.)

Note: Further data on the dam construction process will be provided by the Corps.

An interesting sidelight was the number of old mines in the area which had to be sealed or filled to make the reservoir water tight. Mining is an item of human history, as well as related to the glacial and preglacial history.

The relationship to Carlyle Lake and downstream navigation should be brought into the portrayal of water level control and the effect Lake Shelbyville has on the Kaskaskia River system.

EXHIBIT - DAM

The purpose of the exhibits in this area would be to provide the visitor with information related to the earthen dam and concrete spillway which forms Lake Shelbyville. Emphasis would be placed upon engineering and construction aspects of this project, as well as the role of the U.S. Army Corps of Engineers in this process.

1. Model of Dam

This will be a diorama of the spillway, part of the earthen dam and the immediately surrounding area. Statistics relating the engineering aspects, such as amount of earth required, amount of concrete poured, the force of the water on the one side of the spillway, and other data will be conveyed through written information. A legend identifying key parts of the structure will be nearby.

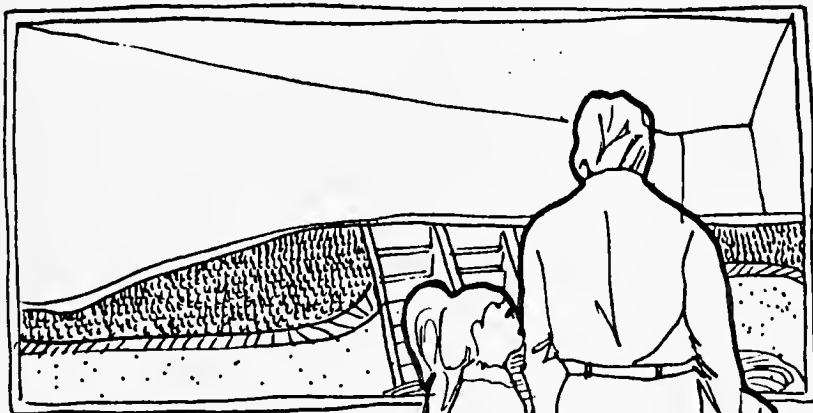
2. Section of Spillway

This will be a diorama representing a cross section of the spillway with more detail shown concerning the actual construction and engineering aspects of the spillway. The Corps involvement in large scale projects such as this will be emphasized here.

3. Mural of Spillway

A floor-to-ceiling mural of the spillway will be shown on the face of this exhibit. The opposite faces of the exhibit will contain photographs and other descriptive materials depicting Corps involvement in the planning and construction of the Shelbyville Dam and supportive facilities.

SHELBYVILLE DAM



MODEL OF DAM



SECTION AND PHOTO MURAL OF SPILLWAY

STORY ELEMENT - KASKASKIA RIVER BASIN

Management of the water resources of the Kaskaskia River Basin was supported by a number of public and private groups who saw management of the river, including the construction of Lake Shelbyville, as contributing to the socio-economic progress of the area.

Early studies by the Corps of Engineers did not come to fruition but through the efforts of the Kaskaskia River Association in the 1930's, directed by such men as H. C. Norcross (Carlyle), and H. I. Hanna (Mattoon), and the Kaskaskia Valley Association of the postwar period, spearheaded by Eldon Hazlet (Carlyle), Emil Burgard (St. Clair Co.) and Bo Wood (Sullivan), plans for the Kaskaskia River Valley progressed.

By 1962 a comprehensive water-resources-management program had been authorized by Congress for the Kaskaskia. Lake Shelbyville meant recreation and industrial opportunities to upstream citizens and flood control, water supply and navigation assistance to down stream interests.

Lake Shelbyville is an important element of the Kaskaskia River Basin program affecting a large portion of Central Illinois.

EXHIBIT - THE KASKASKIA RIVER BASIN

Narrative

"The Kaskaskia River, which is about 325 miles long, and its tributaries drain an area of 5840 square miles. This includes all or part of 22 counties in Central Illinois and covers about 10 percent of the land area of the entire state.

The River has had an important influence on residents of the Kaskaskia River Basin. The lower Kaskaskia has historically served as an important transportation link. It has served a number of communities and industries as a water supply. The River also experiences significant variation in flow, from ripping floods to low summer trickles.

The planning of the water resources was approached on a river basin basis, therefore Lake Shelbyville is but one of a number of developments by the Corps of Engineers which, in concert with the other projects, is designed to help meet multiple purposes. Carlyle Lake is the other large impoundment along the Kaskaskia.

Management of the water resources of the Kaskaskia River Basin was supported by public and private groups who saw management of the river, including construction of Lake Shelbyville, as contributing to the improvement of socio-economic conditions in the region.

A moving force behind the project was the Kaskaskia Valley Association (KVA) formed in 1953 to promote the planning of the project.

A large map of the entire basin would emphasize the Corps of Engineer projects in the Kaskaskia River Basin. The projects can be highlighted with color, backlighting or pinpoint lighting to focus thereon.

Historic photos (slides) of transportation, steamboats, an old river town, photos of the river in flood and drought and slides of the local personalities and congressional leaders who were instrumental in pushing the project can be shown on the audiovisual units on either side of the Exhibit.

EXHIBIT - LOCAL INTEREST AND HISTORY

Some counter space and wall area will be devoted to the exhibits of local community organizations, such as the Shelbyville Historical Society, for exhibits by these organizations. These exhibits would be periodically changed by the local organizations to provide different areas of interest.

STORY ELEMENT - PUBLIC USE OF THE PROJECT - OVERLOOK TERRACE

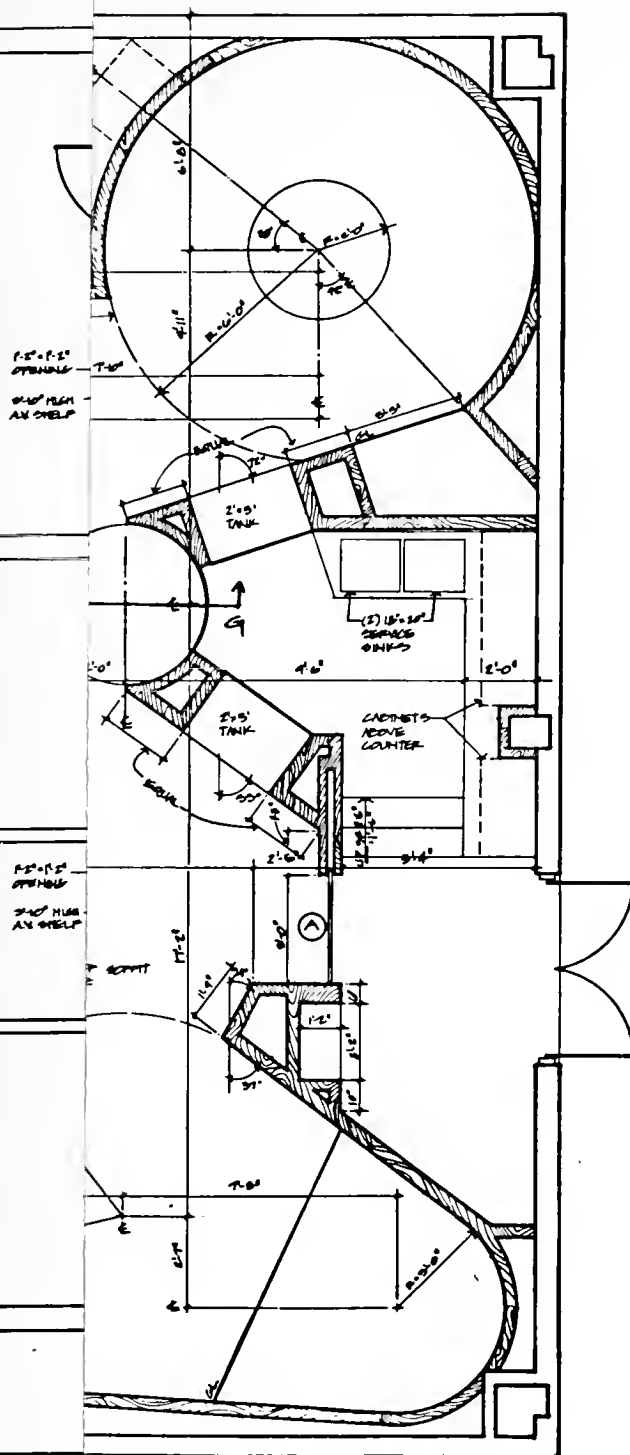
The primary purpose of the reservoir is for flood control; however, it is a multi-purpose project with fish and wildlife conservation, navigation water release, domestic and industrial water supplies and recreation as existing or potential elements.

From the overlook terrace a portion of the 11,100 acre lake can be seen, which provides a representative example of the shoreline, recreational facilities and activities, a view of the dam and the relationship to the community of Shelbyville. The percent of the water area actually seen could be brought out.

Recreational activities such as swimming, picnicking, boating, camping, fishing and water skiing can be pointed out. Attention can be drawn to the dam but that story would be told at the dam overlook and on that trail.

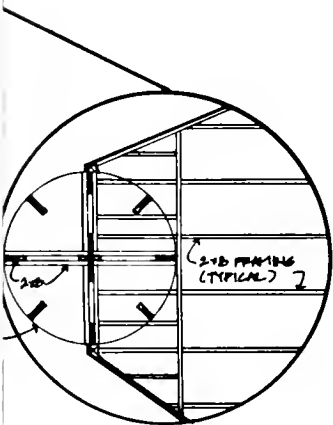
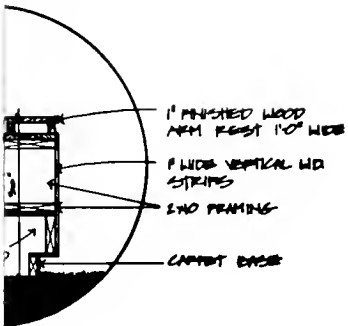
The 172-mile shoreline is nearly all forested and extends into numerous narrow and fairly steep valleys in a region where topographic relief is minimal. The lake provides a distinctive environment for outdoor recreation in an area where there is very limited opportunity for waterbased recreation.

The overlook terrace will be completed as another phase of the area development.

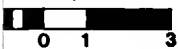


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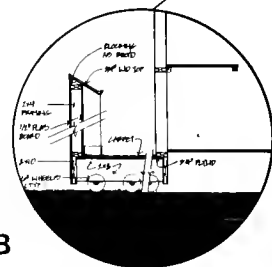
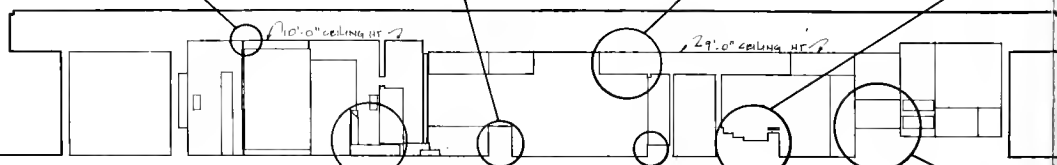
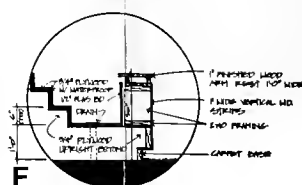
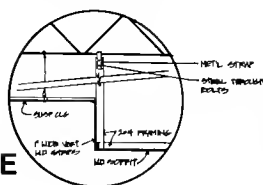
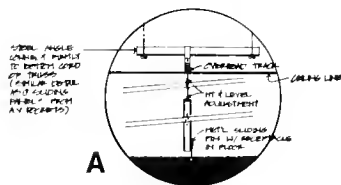
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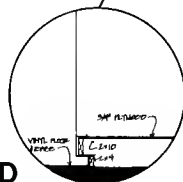
AQUARIUM FRAMING



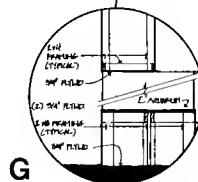
A horizontal color calibration bar with a grayscale ramp from 0 to 3.



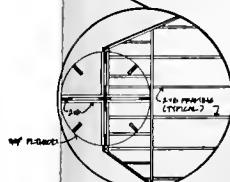
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OUTLINE SPECIFICATION

Section 1--General Data

Outline specification for overlook terrace and interior construction

--Does not include exhibit specification

Section 2--Site Work

- Walks and terrace--concrete
- Wood benches and trash receptacles--Landscape Forms
Route 3
Kalamazoo, MI 49001

or

Rosenwach, Inc.
96 N. 9th St.
Brooklyn, NY 11211
- Landscaping--shade trees--3"--balled and burlapped
flowering trees--1 1/2"--balled and burlapped
shrubs--2 feet diameter
disturbed areas--replace with sod

Section 3--Concrete

- Walks and terrace--3000 psi, air entrained
- Reinforced with wire mesh
- Steel bars in grade beam
- 1/2" expansion joint at building

Section 4--Masonry

None

Section 5--Metals

- Handrails--"Connect-O-Rail System"

Julius Blum and Co.
Carlstadt, N.J.

Section 6--Wood and Plastics

- Framing lumber: Ponderosa Pine or Douglas Fir--select grade
- Plywood--3/4" C-D plugged
- Wood Trim--clear white pine
- Plastic laminate--formica or corian
- Plastic tube for aquatic display: Nering's Plastics
1825 Oakton St.
Des Plaines, IL 60018

Section 7--Thermal and Moisture Protection

- Dome for Indian Exhibit C-48 Clear Acrylic

Bohem Manufacturing Company
Conshohocken, PA 19428

- Insulation Above Ceiling 6" fiberglass

Section 8--Doors and Windows

- All interior sliding doors and panels to be birch solid core
- Folding door at reception counter is a wood folding door series 358

Rolscreen Company
Pella, Iowa 50219

- Sliding door and panel hardware

Grant Hardware Company
10 High Street
West Nyack, N.Y. 10994

- Glass for exhibit cases is 1/4" plate unless noted otherwise

Section 9--Finishes

- Acoustical suspended ceiling
- "minatone" system with Georgian design tiles

Armstrong Tile Company
222 S. Meramec Ave.
St. Louis, MO 63105

- Gypsum wall board and thin coat plaster

Gold Bond Building Products
Buffalo, N.Y. 14202

- Painting materials

Sherwin Williams Company
Professional Coatings Division
101 Prospect Ave., N.W.
Cleveland, Ohio 44115

- Lobby flooring

Solid Vinyl Tile
Terresque, Terra Cotta TE62
Kentile Floors
4532 S. Kolin Ave.
Chicago, IL 60632

·Audio-visual room and exhibit room carpet

Partisan 715 #245 Charglow

Armstrong
222 S. Meramec Ave.
St. Louis, MO 63105

Section 10--Specialties

·Signage, directories, bulletin boards, and letters

A.C. Davenport & Son Company
306 E. Hellen Road
Palatine, IL 60067

or

Architectural Signing, Inc.
4082-92 Glencoe Ave.
Marina Del Ray, CA 90291

·Ash urns

W-1780

Watrous Inc.
106 Gateway Road
Bensenville, IL 60106

·Lobby wall at drinking fountain

Watrous Modular System

·Module to include:

drinking fountain	W-3013-TD
fire extinguisher cabinet	W-3113-EC
ash tray	W-3413
speaker panel	W-4211-C

Watrous Inc.
106 Gateway Road
Bensenville, IL 60106

Section 11--Equipment

·Aquarium tanks

Frigid Units, Inc.
3214 Sylvania Ave.
Toledo, Ohio 43613

·Slide projectors with built-in screen

Singer Educational Systems
Caramate Playback SP.

Section 12--Furnishings

·Folding/stacking chairs "Plia"

Castelli
950 Third Ave.
New York, NY 10022

·Exhibit drawers

Backer Co.
320 Thornton
St. Louis, MO 63119

Section 13--Special Construction

(none)

Section 14--Conveying Systems

(none)

Section 15--Mechanical

·Workroom sink

Elkay Manufacturing Company
2700 S. 17th Ave.
Broadview, IL 60153

·Fire Extinguisher Cabinets Panorama Model 1000 Trimless Iden. V.

J.L. Industries
4450 W. 78th St.
Bloomington, Minn. 55435

Section 16--Electrical

·Down lights Baffle down-lights # 1212-910

·Retractable Spots Retractable Spots #1221-412

·Track-lighting Miland Spot #93411

·Exit lights #77211

·Flourescent lights #5965 or #5967

This lighting by:

Prescolite
1951 Landmeier Road
Elk Grove, Illinois 60007

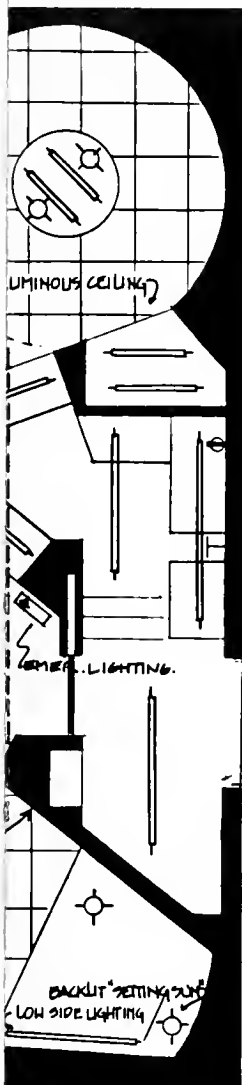
·Emergency Lighting

"Watchmaster"
Carpenter Lighting Products
706 Forrest St.
Charlottesville, VA 22901

·Clock

24" diameter Big "H"

Electric Time Company
16 Union St.
Natick, Mass. 01760



ENT)

COST ESTIMATE--SUMMARY

Construction

Lobby Area	\$14,150
Audio-Visual Area	8,850
Exhibit Area	10,100
Subtotal	<u>\$49,200</u>

Exhibits

Lobby Area	\$ 1,250
Audio Visual Area	11,100
Exhibit Area	77,215
Subtotal	<u>\$89,565</u>

GRAND TOTAL \$138,765

COST ESTIMATE--CONSTRUCTION, LOBBY AREA

Flooring	\$ 2,000
Walls	1,500
Ceiling and Soffit	1,500
Counter	4,000
Lighting	2,000
Water Fountain	300
Trash Receptacles	250
Bulletin Boards	500
Ash Urns	350
Fire Extinguishers	350
Clock	300
Seating	600
Tables	500
Subtotal	<u>\$14,150</u>

COST ESTIMATE--CONSTRUCTION, AUDIO-VISUAL AREA

Flooring	\$2,000
Ceiling and Soffit (including insulation)	1,000
Doors	300
Sliding Light Panels	400
Lighting	2,000
Fire Extinguisher	150
Seating	<u>3,000</u>
Subtotal	\$8,850

COST ESTIMATE--CONSTRUCTION, EXHIBIT AREA

Walls	\$ 2,500
Ceiling and Soffits (including insulation)	1,500
Workroom	2,000
Doors	150
Lighting	3,800
Fire Extinguisher	150
Subtotal	<u>\$10,100</u>

COST ESTIMATE--EXHIBITS, LOBBY AREA

Photo mural of Lake Shelbyville	\$1,000
Banner	250
Subtotal	<u>\$1,250</u>

COST ESTIMATE--EXHIBITS, AUDIO-VISUAL AREA

Walls	\$ 2,000
Screens for Slides & Movies	4,000
Sound Slide Projectors with Built-in Screens (4)	2,000
Kodak Carousel Slide Projector with 2 1/2" Lens (3)	1,200
Kodak Movie Projectors (2)	1,000
Speakers (3)	900
Subtotal	<u>\$11,100</u>

COST ESTIMATE--EXHIBITS, EXHIBIT AREA

<u>Display Unit</u>	<u>Cost Breakdown</u>	<u>Total</u>
Water--a precious resource		
pump	100	
graphics	750	
basic display	<u>5,000</u>	5,850
Glaciation		
diorama unit including lighting		
within, lettering, miniature		
animals	8,000	8,000
Sliding drawers--Minerals and Soils		
drawers <u>not</u> lighted internally		
and <u>not</u> removable		
6 drawers	900	900
Flood and Soils		
back-lighted, color transparencies		
with sequential lighting and		
button control	3,000	3,000
Aquatic--Circular, Free-standing		
glass display unit	1,400	
2 ducks	100	
1 ne gull	65	
fishes:		
walleyes	75	
crappie (3)	120	
smaller fish	100	
plant accessories	400	
design and build pedestal	400	
construction and installation	3,000	
separate, wall-installed label-unit		
for display	<u>250</u>	5,910
Wetlands--photographic panorama		
enlargements of selected photos		
and installation of same	800	800

COST ESTIMATE--EXHIBITS, EXHIBIT AREA (CONTINUED)

<u>Display Unit</u>	<u>Cost Breakdown</u>	<u>Total</u>
Wetland Panorama		
plant accessories	400	
insect accessories	400	
frogs, crayfish, etc.	600	
mounted goose	150	
painted background	800	
installation	1,500	
label	<u>200</u>	
		4,050
Food Chain		
back lighting	300	
mtd. fish--large	75	
mtd. fish--smaller--2	80	
plant accessories	200	
graphics	800	
installation	<u>500</u>	
		1,955
Aquaria	5,000	5,000
Prairie Habitat		
mtd. prairie chickens	200	
accessories:		
plants	1,500	
red wing blackbird		
meadowlark		
butterflies		
garter snake	400	
painted background	1,500	
installation	2,000	
audio system and tape	<u>1,000</u>	
		6,600
Forest Upland		
mtd. animals:		
1 raccon	125	
1 flying squirrel	75	
1 fox squirrel	60	
various birds-6+	240	
accessories:		
mushrooms		
wildflowers	850	
background painting, trees (one		
of which is hollow with mammals		
therein), bushes and installa-		
tion of sample	<u>4,000</u>	
		5,350

COST ESTIMATE--EXHIBITS, EXHIBIT AREA (CONTINUED)

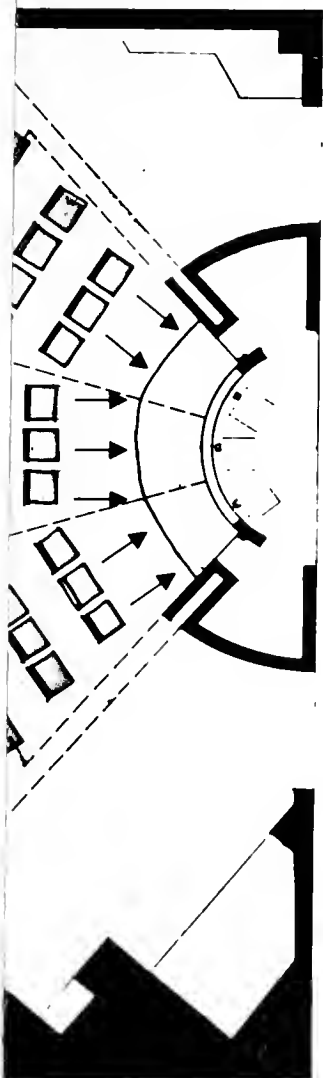
<u>Display Unit</u>	<u>Cost Breakdown</u>	<u>Total</u>
Forest Photographic Panorama enlargements of selected photos and installation of same	600	600
Indian Village design, planning and construction diorama foreground--houses and plaza. Palisade indicated on side of diorama and reducing in scale to background. Background, several truncated mounds tying in with background painting. Indication of stream or river in extreme foreground. See Kincaid (Mid Miss) reconstruction at State Museum. Indians to scale for foreground and background dome and base sequence lighting	4,500 600 600	5,700
Indian-Settler Comparison design and graphic and photos back-lighted legends (2) assuming artifacts from historical societies--University of Illinois	700 400 no charge: <u>gift or loan</u>	1,100
Automatically changeable Indian Exhibit sliding panels preparation of displays for 6 units or panels	900 900	1,800
Lake Shelbyville back lighting preparation of display	300 300	600
Prairie Transition photos and legends	400	400

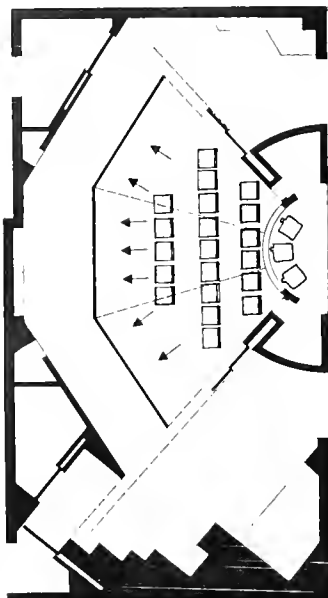
COST ESTIMATE--EXHIBITS, EXHIBIT AREA (CONTINUED)

<u>Display Unit</u>	<u>Cost Breakdown</u>	<u>Total</u>
Dam Exhibit		
model of dam	5,000	
model of spillway section	3,000	
photo mural of spillway	<u>500</u>	
		8,500
Kaskaskia River Basin		
back-lighted panels	800	
audio	<u>500</u>	
		1,300
Walls for Exhibits	7,000	7,000
Display Pit		
(including signage)	2,800	<u>2,800</u>
Subtotal		<u>\$77,215</u>

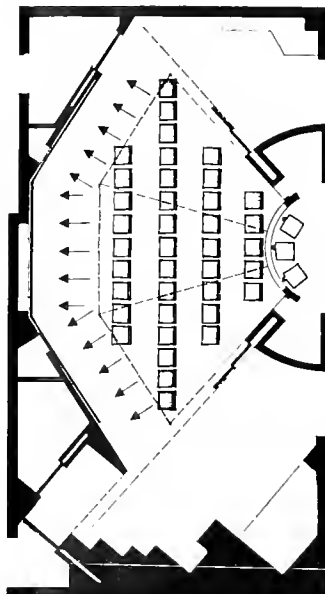
COST ESTIMATE--CONSTRUCTION, OVERLOOK TERRACE

Demolition	\$ 1,000
Grading	2,000
Concrete Walks and Terrace	4,000
Handrail	1,500
Benches	1,500
Trash Receptacles	500
Lighting	1,500
Signage	500
Trees	2,000
Shrubs	800
Speaker	800
Subtotal	<u>\$16,100</u>

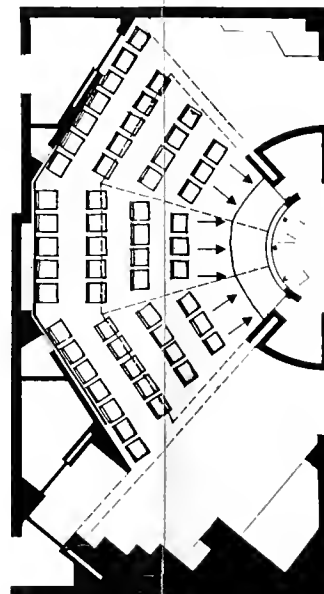




NORMAL SHOW



LARGE SHOW



SPEAKER

MINI-THEATER SEATING ARRANGEMENT

LAKE SHELBYVILLE
VISITOR CENTER
AUDIO-VISUAL PROGRAM
(Preliminary timing-about 9 min.)

Slide Description		Story Line (Narrative & sounds)
Symbol of U.S. Army Corps of Engineers	1	(sound of rushing water)
View of Lake Shelbyville with name superimposed on slide	2	Water is a dynamic element in our lives - Everyday
Water tower	3	Water can be helpful- We use it for- domestic water supply-
Industrial plant	4	Industrial purposes
Beach with boating in background	5	Recreation
Barges on a river	6	Navigation & transportation
Waterfowl in flight	7	and Wildlife Management (duck sounds)
Flood scene	8	Water can be destructive when there is too much (water rushing)
Drought Scene	9	Or can affect us adversely when there is too little (wind blowing)

Slides	Narrative
Canoeing on a lake	10 Water, in any event, is one of our most important natural resources and its use,
Waterfall	11 control and conservation are matters of national concern.
Historic scene of early Corps activities	12 The U.S. Army Corps of Engineers has been involved with water and recreation resource development for over 150 years
Old River Boat (Stern wheeler)	13 In the early days of our nation, the Congress assigned to the Corps the responsibility for development of navigation on the rivers and coastal waters of the United States.
Dam & Power House at a Corp Project	14 In later years, flood control and hydro-electric power development responsibilities were assigned
Yellowstone Park Bridge (p. 15 - "The Corps in Perspective since 1775)	15 Corp personnel assisted with planning and development of National Parks prior to the formation of the National Park Service
Array of Planning Reports	16 Today the Corps responsibility covers the entire field of comprehensive water resource planning,
A child drinking from a water fountain	17 including water supply
laboratory scene	18 water quality control

Slides		Narrative
Camping scene	19	recreation
white-tail deer	20	and wildlife management.
People watching from blind or observation tower	21	The wildlife management and conservation program develops opportunities for wildlife observation in protected sanctuaries
Photographer set up	22	for photographing wildlife
Hunters walking	23	or more actively hunting wildlife where areas are open for this purpose.
Outdoor scene	24	The preservation of esthetic and ecological values is one of great importance in planning Corps' projects.
Aerial view of Lake Shelbyville with dam in foreground	25	Lake Shelbyville is one of many multi-purpose projects planned and developed by the Corps in the United States.
Dam construction scene	26	Construction of the project
Dam construction scene	27	started in 1963 after many years of planning, since 1937.
Dam construction scene	28	(sounds of equipment and men in background,
Dam construction scene	29	to portray excitement.)

Slides		Narrative
Lake partially filled	30	The lake began to fill in 1970,
Early recreational use	31	and active public use of the project was permitted on a limited basis in 1971.
Kaskaskia River Basin Map without reservoirs	32	Prior to the approval of the project by Congress, there was a great deal of public involvement by Citizens of the Kaskaskia River Basin.
Group meeting scene	33	Different groups and individuals were concerned with various aspects of water management related to the river.
George Richardson	34	Mr. George Richardson was one of the people deeply involved with the Kaskaskia Valley Association.
Related to Richardson	35	(Comments by Mr. Richardson
" " "	36	30-45 second prepared after discussion.)
" " "	37	
" " "	38	
Kaskaskia River Basin Map with reservoirs and other projects. (levees, nav. channel)	39	These efforts culminated in the construction of

Slides		Narrative
Scene of Carlyle Lake	40	Carlyle Lake,
Barges, tug using this channel	41	navigation on the lower channel,
Levee on the Kaskaskia	42	levees to protect flood-prone areas,
Scene of Bruce-Findlay bridge and Okaw Island	43	and Lake Shelbyville.
Upper end Reservoir	44	As you can see, Lake Shelbyville is only one of the elements of the total comprehensive water management plan for the Basin.
High rate of water release from dam	45	It is a key element because of its location in the upper reaches of the watershed. It can control water release
Normal release rate	46	rates depending upon rainfall, spring melt and other factors.
Levee with flooding on one side	47	Water level control has an impact on down stream areas. Sometimes they must also be protected with levees.
Very crowded beach (9th Street)	48	Recreational facilities and other use opportunities at Lake Shelbyville provide about 3 million visitor days of enjoyment each year.
Picniking at Bo Wood	49	Visitors can participate in such activities as picniking at the Bo Wood Recreation area.

Slides		Narrative
Camping	50	Camping at Lone Point or Lithia Springs,
Hiking	51	hiking on a trail or through the woods at Coon Creek,
Sailing	52	sailing wherever your skills will take you.
Water skiing	53	Water skiing on the Big Water,
Fishing in a cove	54	or more passive activities like fishing,
School group with our interpreter	55	or a school group, guided by the interpreters, learning about the environment.
A Ranger in the field like they are talking to the audience	56	We hope you are going to be with us awhile to participate in some of the activities you have seen in this presentation. If you are only passing through, maybe we can help you with more information so you can plan to come back and see us.
Slide of entrance to Exhibit Area; close-up of moving water exhibit	57	There are many other things of interest to see in the Exhibit Area just across the Lobby. If you haven't seen it yet, it's worth checking out. Thanks for stopping in to see us and be sure to come again.

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